

MOTOR TREND

The Magazine for a Motoring World

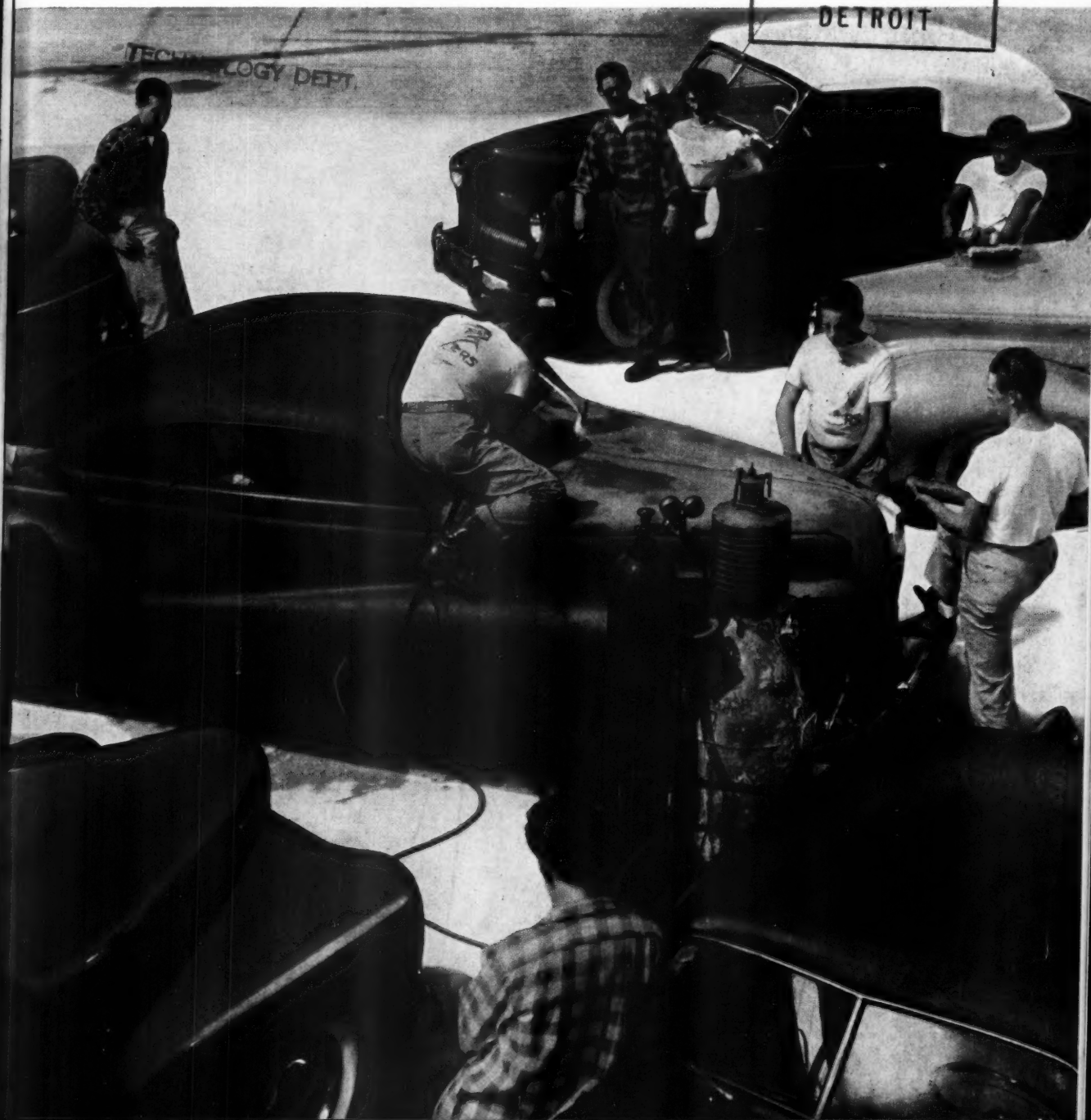
OCTOBER 1951 25c

BANDITS IN COVERALLS
ANOTHER MOTOR TREND EXPOSE

The Steam-Car Speed Legend
PUBLIC LIBRARY

NOV 17 1953

DETROIT



PROVED AGAIN

IN AFRICA

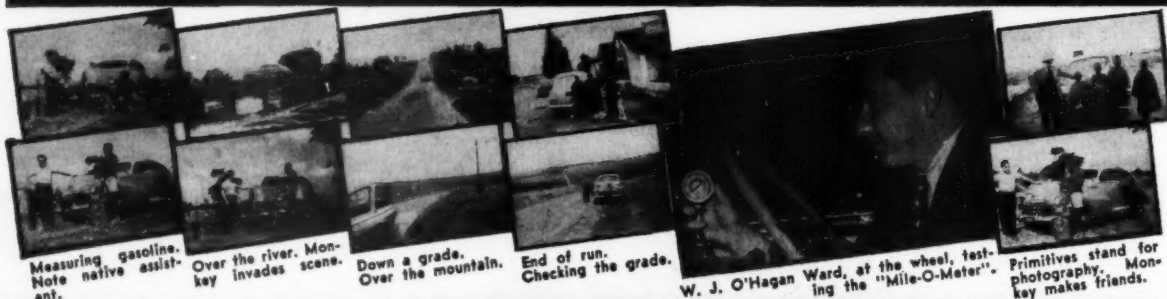
AT 6000 FEET ABOVE SEA LEVEL
OVER UNPAVED ROADS AND JUNGLE SWAMP - BLISTERING HEAT - WILTING HUMIDITY, CHEVROLET FLEETLINE GETS 29.6 MILES PER GALLON!

"MILE-O-METER"

with

World's Famous
Miles Per Gallon and Motor Tune-up Gauge

This test is in no way an endorsement of the Chevrolet by Gale Hall Engineering.



Measuring gasoline. Note native assistant.

Over the river. Monkey invades scene.

Down a grade. Over the mountain.

End of run. Checking the grade.

W. J. O'Hagan Ward, at the wheel, testing the "Mile-O-Meter".

Primitives stand for photography. Monkey makes friends.

W. J. O'Hagan Ward reports the test of the "Mile-O-Meter" over a test circuit of 24.8 miles. A standard stock '48 Chevrolet does 29.6 Miles Per Gallon with "Mile-O-Meter".

Driven by A. L. Page of A. W. Hawkins Co. of Johannesburg, South Africa, and Sydney, Australia. Mr. Page, an expert driver, runs course in 32 minutes and 10 seconds, without "Mile-O-Meter", and gets 22.5 M.P.G. Then drives the course with "Mile-O-Meter", in 32 minutes and 40 seconds and continues on for 7.1 miles before the gallon of gasoline is exhausted!

The test was conducted on unpaved roads, through jungle swamp, over water covered roads, up to 6,000 ft. above sea level, over carefully measured course.

A. L. Page drove the Chevrolet with ONLY one gallon of gasoline, with the "Mile-O-Meter", to a record mileage of 29.6 M.P.G. In Africa, where heat reaches 130° in the shade, and where the humidity is wilting, "Mile-O-Meter" proved its worth.

INSTALL THE MILE-O-METER

miles per gallon and motor tune-up gauge

Fits all cars. Permanently mounted in 1 to 5 minutes. No holes to drill — no experience needed. Teaches you how to drive economically. Checks spark plugs, carburetor and 31 motor adjustments. Tested and approved by leading automotive associations and manufacturers. Performance charts and suggestions enable you to determine miles per gallon you are getting — what adjustments to make to increase mileage. You can check engine condition at all times. "Mile-O-Meter" will tell you how to correct any inefficiencies.

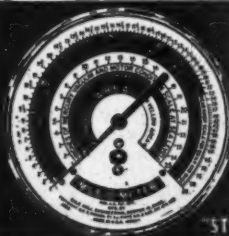


TEACHES you how to drive economically — eliminates the Jack Rabbit starts and gasping on hills — that's where you really drink up fuel.



YOU can check your engine condition at all times, and if it is not operating efficiently, Mile-O-Meter will tell you how to correct the condition.

Map shows course measured in South Africa



A PRECISION INSTRUMENT BY CRAFTSMEN.
LASTS A LIFETIME — GUARANTEED ACCURATE.
THE MODERN WAY TO DRIVE. NO CAR COMPLETE WITHOUT THE MILE-O-METER.

DELUXE CHROME MODEL 3 1/2" Dia. \$14.95
STANDARD MODEL 2 1/2" Dia. \$9.75

HUGE 24 page book and Mileage Calculator included



"STANDARD THE WORLD OVER - IMITATED BUT NOT EQUALLED"

SEND YOUR ORDER TODAY

GALE HALL ENGINEERING INC., DEPT. 1179 BOSTON 18, MASS.

World's Largest Producers of Tune-Up Gauges

Please send _____ DELUXE _____ STANDARD Mile-O-Meters at \$ _____

Name _____

Address _____

City _____ Zone _____ State _____

☐ Check enclosed ☐ C.O.D. ☐ Gift Wrapped (Free)

"THE GIFT FOR THE MAN WHO HAS EVERYTHING"

money back guarantee.

AMAZING! NEW! Motoring Magic

THESE ARE YOUR
Select-o-Drive
DEALERS

Auto Accessories Co.

127 W. Washington
Los Angeles, Calif.

California Speed and Sport Shop

298 Jersey Ave.
New Brunswick, N.J.

Eastern Auto Supply

3319 S. Grand Ave.
Los Angeles 7, Calif.

Gratiot Auto Supply Co.

9146 Gratiot Ave.
Detroit 13, Mich.

National Auto Supply

1391 Stratford Ave.
Bridgeport, Conn.

Speed Parts, Inc.

Route 6
East Paterson, N.J.

Stricks Automotive Supply Co.

Colonial Beach, Va.

The Hot Rod Shop

8249 Grand River
Detroit 4, Mich.

Select-o-Drive sells for but \$10.95 and can be purchased or ordered from any of the dealers listed above.

with

Select-o-Drive

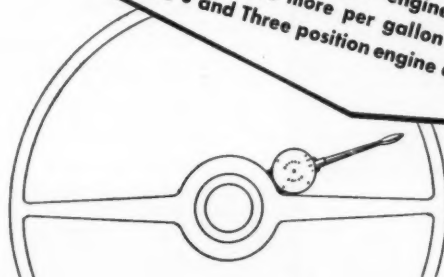
COMPLETE COMBINATION OVERDRIVE SELECTOR AND HILL HOLDER

Select-o-Drive puts that lazy overdrive to work for extra driving comfort.



Only Select-o-Drive gives you:

- Six forward speeds • Choice of 2 ratios in any gear • Clutchless shifting • Greater acceleration (to 50 in low — 75 in 2nd) • increased engine compression • Longer engine life • Less tire wear • Miles more per gallon • Longer brake life • and Three position engine and gear control



With Select-o-Drive you can engage your overdrive and forget it. Fingertip control makes city driving in heavy traffic easy, mountain driving a cinch and those long cross country jaunts a joy, particularly when it comes time to pay the gas bill. You'll go longer between repair bills, too, if your car is equipped with Select-o-Drive.

Select-o-Drive services the following cars equipped with overdrive units: Ford, Lincoln, Mercury, Studebaker, Nash, Hudson, Willys Jeep, Kaiser-Frazer, Henry J, Packard, Chrysler, De Soto.

SPECIAL INTRODUCTORY OFFER:

All old type overdrive selectors, regardless of make or condition, are worth \$2.00 in trade on new Select-o-Drive.

MOTORAMA

will offer the finest
**TECHNICAL EXHIBITS
FROM DETROIT**

**A Look At the Future of
American Automotive Progress**
**The Country's Most Beautiful Custom
Cars—Most Colorful Classic Cars
and Most Dashing Sport Cars.**

**A Glittering Array of Motorized
Equipment Never Before Equalled
for Charm, Technical Interest
and Uniqueness.**

PAN PACIFIC AUDITORIUM

Los Angeles, California

NOV. 7-11

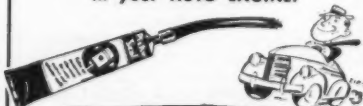


Sponsored by the Publishers of
MOTOR TREND

1015 So. La Cienega Blvd., Los Angeles

PISTON SEAL

is "Penicillin"
in your AUTO ENGINE!



DON'T spend Big Money overhauling your car! Use Holt's "Piston Seal" instead! Exactly what is your trouble? Burning oil? Lacking power? Piston slap? Worn cylinders? "Piston Seal" effectively eliminates these ailments! By forming self-expanding pliable lubricating seal around the pistons, this amazing British product compensates for wear! Restores compression! Cuts oil loss! Checks piston slap! Lasts 10,000 miles! Cannot harm the finest engine: easily installed. The British call it a "God-send!" You will, too!



**DETAILS FREE!
WRITE TODAY!**

**R. H. PHILBRICK, Auto Div., 28
161 Aragon Ave., Coral Gables 34, Florida**
RUSH details on Piston Seal—without obligation!

NAME.....
ADDRESS.....
CITY..... STATE.....

MOTOR TREND

THE MAGAZINE FOR A MOTORING WORLD

OCTOBER 1951

Published Monthly



VOL. 3 • NO. 10

CONTENTS

FEATURES:

- AB DOES IT AGAIN —9
- THE STEAM CAR LEGEND By Malcom Andrews—14
- BUICK MOTOR TRIAL By Griff Borgeson—16
- SUPREME SPORTS CAR By Richard Rush—18
- CAR CLUBS By Dick van Osten—19
- THOMPSON SPORTS CAR MEET By John Bentley—20
- BANDITS IN COVERALLS By Eugene Jaderquist—22
- CONSERVATIVE CUSTOM —24
- FULL-TREATMENT FORD —25
- LE SABRE CUTS A CAPER —26
- EFFYH 500 CC SPORTS TRIAL —28
- GRAND PRIX AT SILVERSTONE —30

DEPARTMENTS:

- READER REFLECTIONS —6
- CUSTOM CREATIONS —8
- SPOTLIGHT ON DETROIT —10
- YOUR EDITOR SAYS —12
- TRACK TALK By Bert Chalmers—33
- WHAT'S YOUR IDEA? —36
- ACCESSORY TRIALS —38
- CLASSIC COMMENTS —42
- SELL AND SWAP —46
- TRADE TOPICS —50

COVER: The Ayala brothers, Gil and Al, are well known throughout Southern California for their fine customizing work. In this photo by Felix Zelenka, Al Ayala is hard at work on the hood of a '40 Mercury club coupe. Flexichrome by Don Fell.

Publishers • ROBERT R. LINDSAY, R. E. PETERSEN

Editor • WALTER A. WORON

Managing Editor • GRIFFITH BORGESON

Art Director • ALBERT H. ISAACS

Associate Editor • RICHARD VAN OSTEN

Detroit Editor • HARRY CUSHING

New York Editor • JOHN BENTLEY

Advertising Sales Manager • ROLLIN MACK

MOTOR TREND, U.S. Copyright 1951 by Trend, Inc., 1015 S. La Cienega Blvd., Los Angeles 35, California. Phone BRadshaw 2-6314. Entered as Second Class Matter at the post office at Los Angeles, California. SUBSCRIPTION RATE: \$3.00 per year throughout the world. Two years—\$5.00. Single copy 25c. On sale at newsstands throughout the country. CHANGE OF ADDRESS: Three weeks' notice is required. When requesting a change, please name magazine and either furnish an address imprint from a recent issue, or state exactly how label is addressed. Change cannot be made without the old as well as the new address. ADVERTISING: Advertising Sales Mgr.—Rollin Mack; Eastern Director—Harry Cushing (2437 Book Bldg., Detroit 26, Mich.); Advertising Director—Floyd J. Wheeler. Closes 40 days preceding publication date. (See SRDS.) CONTRIBUTIONS: Manuscripts, photographs, and drawings not returned unless accompanied by self-addressed stamped envelope. No responsibility assumed for unsolicited material. CIRCULATION MGR.—Gordon Behn. Printed in U.S.A. by Pacific Press, 5201 So. Soto St., Los Angeles 38, California.

In This Issue...

MALCOLM ANDREWS' "Steam Car Speed Legend" is a summary of tall tales and true about an automotive power source that is almost mythical today. The article explodes some almost indestructible fables, at the same time tells of some of the real accomplishments of steam on which the fables are based. But Andrews' article can be much more than an isolated story on steam. It can be an introduction to more detailed descriptions of the great steam cars . . . cars like the E-Series Dobles which, more than 20 years ago, were as smooth and flexible as a well-tuned Hydra-Matic Caddy is today. In fact, the steam car of tomorrow—a fascinating machine, although it may never be built—stands complete on the drawing board now. We can bring you these stories. Do you want them?

MOTOR TREND's racket-busting researcher, Eugene Jaderquist, brought you "The Rebuilt Engine Racket" in July. We've been flooded by mail praising that exposé, authorized its use in civic clean-up campaigns; thousands of reprints have been ordered by reputable engine rebuilders and one of the world's biggest auto manufacturers has bought more thousands of reprints for service organization instruction. In this issue, Jaderquist continues his series of exposés with "Bandits in Coveralls," an entertaining, exhaustive account of how John Q. gets hooked by unscrupulous mechanics. The Police Department of Los Angeles, the Better Business Bureau, and many legitimate garage owners furnished the author his facts.

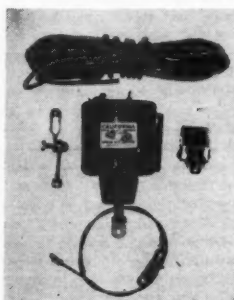
"The Supreme Sports Car" is written by an individual already familiar to our readers as owner of the Phantom Corsair (MOTOR TREND, April 1950). Richard Rush of Washington D.C. is also the owner and builder of the Offy-Cisitalia, a mighty close approach to the ultimate in a fast, personal conveyance.

This month's "Sports Trial" is America's first detailed test of a 500 cc racing machine. Obviously, the Effyh and its like cannot be classed as sports cars. But 500 cc racing cars are vastly important. First, these are *full grand prix racing machines*, have their own international formula—Formula III—under the FIA. Second, their cost and upkeep are almost absurdly low, compared with any other type of grand prix car (Formula I and II). But the greatest significance of Formula III is that anyone can build his own GP car out of easily-obtained components at very little cost. All over Europe, hundreds of 500 cc machines, both home- and factory-made, are reviving big-time racing for the owner-driver of moderate means. It could happen here, and probably will. —G. B.

October 1951

celebrating our 32nd ANNIVERSARY

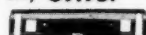
For 32 years we have been presenting to the public, the newest and finest Calif. Custom Accessories, at the lowest possible price. The letters and reorders from our customers prove that the Eastern Auto Supply Co. (Custom Accessories) does not have dissatisfied customers. Every item sold carries a "satisfaction guarantee." Order today with confidence. Immediate delivery.



ELECTRIC REAR DECK LATCH KIT—Amazing New Dual Purpose auto accessory. Will add to streamlining and "customized" appearance of car trunk. Very practical. Gives added burglar proof protection. Simple to operate. Trunk opens by mere touch of a button inside your car. Impossible to open trunk when car is locked. Kit fits Ford 1937-'51, Olds 1949-'51, Chev. 1949-'51, Pontiac 1949-'51, Cadillac 1949-'51, Merc. 1939-'51. Specify make, model and year. Complete kit with easy to follow instructions and diagrams only **\$9.95.**

CHROME DASH PANELS

Avoid having that old, faded, worn-out plastic "look" inside your car. Replace with these beautiful inexpensive chrome plated panels. Easy to install.



1940 Ford Radio Panel \$2.95



1941 Ford Radio Panel \$3.45

Specify Philco or Zenith



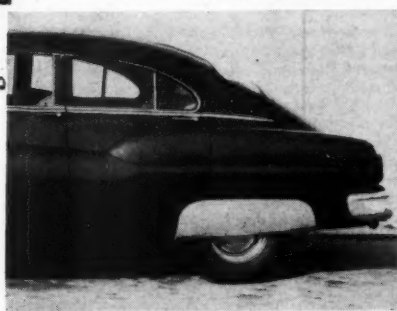
1941 Ford \$8.95



1942-48 Fords \$15.95

BUICK FENDER SKIRTS

All models 1950-1951. Beautiful Custom built skirts. Gives your Buick an added finished look. Made of heavy gauge steel, rubber insulated, die stamped, contour formed, with top quality workmanship—**\$14.95 pr.**



MERCURY GRILLE CENTER—1949-'50

—Modernize your 1949-'50 Mercury grille with 1951 styling. Streamlines appearance, eliminates center bar. Presents a solid, massive looking front. No welding or cutting necessary. Drill only 2 holes. Very simple installation. Die stamped, chrome plated—**\$6.95.**

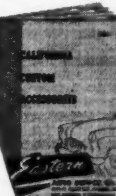


When ordering, please specify year, make & model. C.O.D. please enclose 25% deposit—Immediate delivery

Dealers Write

"CUSTOM" CATALOG

—40 illustrated pages with over 100 photos of latest Custom accessories for your car, plus parts for super motor performance and economy. Only 25c.



Buy by Mail . . . with confidence.

Please send the following items:

1.
2.

Name.....

Address.....

City.....State.....

Please send the following items.

1.
2.

Name.....

Address.....

City.....State.....

Eastern

AUTO SUPPLY CO.

"CUSTOM ACCESSORIES"

3319 MT-10, S. Grand Ave.
Los Angeles 7, California

Five

Reader Reflections



Letters published in this department are the opinions of the writers and are not to be construed as those of the editors. Address correspondence to: Reader Reflections, MOTOR TREND, 1015 South La Cienega Boulevard, Los Angeles 35, California

NATIONAL VEHICLE CODE

Gentlemen:

I am in full agreement with the editorial of your August issue. However, another of my pet peeves that you failed to bring out was the way some of the cities place traffic signals at nearly every alleyway and secondary street junction along main highways like U.S. 66, 22, and 30.

Sgt. W. B. Tomlinson
Indiantown Gap, Penna.

Gentlemen:

A "well done" on your editorial dealing with the inconsistency of traffic laws in the August MOTOR TREND. I'm another one of the motorists who is "snowed" by the difference in laws, especially city laws.

If you think there is any way to bring about a National Vehicle Code you have my blessing. I want to help get it squared away and I think if enough people took an interest in it, we would soon have the problem licked!

Dale Varner
Patuxent River, Md.

Gentlemen:

You certainly hit the well-known nail on the head with your editorial on a much-needed National Vehicle Code. Every word of your editorial is true, for I have driven in the majority of these United States and I can say that the traffic laws are . . . twisted.

There should be a blanket law covering all traffic laws and these laws be the same for all states. To get a program such as this rolling would be the tough problem, but I am behind any one who has guts enough to start it. I am also certain that there are countless numbers who will stand behind any person or group of persons who get it started.

Ford E. Kleinman

Gentlemen:

I am with you, Walter Woron, on the cross-country laws.

Daniel Baldwin
Bloomfield, N. J.

Gentlemen:

If I can do anything in any way to help adopt a National Vehicle Code I would only be too glad to help. Travel throughout the country is one big headache.

Milton Meyer Jr.
Morris, Ill.

A TEEN-AGER TALKS

Gentlemen:

I would like to disagree with Mr. Barton and his "School for Safety," ["Reader Reflections" July, 1951], and state a few of my ideas on the subject from a teen-ager's point of view. I am one of the novice teen-age drivers to which he refers, and I do not think that we are looked at in the right light. As in numerous other things the majority are judged by the minority.

The teen-ager should not be limited to any amount of horsepower of the car that he can drive, not only because it is unreasonable but also because of the added expense forced on a family that can only afford one car.

The driving test should be harder than it is in some states and violators should be dealt with more sternly than they are at present. Every driver should have to take a refresher course. Many do not remember the rules,

especially the hand signals . . . most important for safe driving.

Maurice Holley Jr.
West Palm Beach, Fla.

A NORTHERN LIGHT

Gentlemen:

. . . From September, 1949, when MOTOR TREND first saw the light of day, a great hue and cry has arisen on such subjects as chrome vs. dechrome, accessories vs. no accessories, style vs. restyle, customize vs. stock, etc. All this hubbub has appeared to obscure an essential detail. I gain the impression that most of the population has gone blithely on, failing to note that there is presently on the retail market an automobile that meets the specifications of the individuals dissatisfied with the "inverted bath tubs." Just give a look at the 1951 Kaiser Special. Do not confuse this with the Deluxe that was tested in your October, 1950 issue. A challenge is hereby tossed into the mill: anyone who can improve on this model of the Kaiser by the common expedient of removing bits and pieces of chrome here and there, chopping, channeling, adding out-of-place grilles and/or fish-tail uplift rear fenders deserves the gilded item for his mantelpiece.

Capt. Harold E. Wells, RCAF
Ottawa, Canada

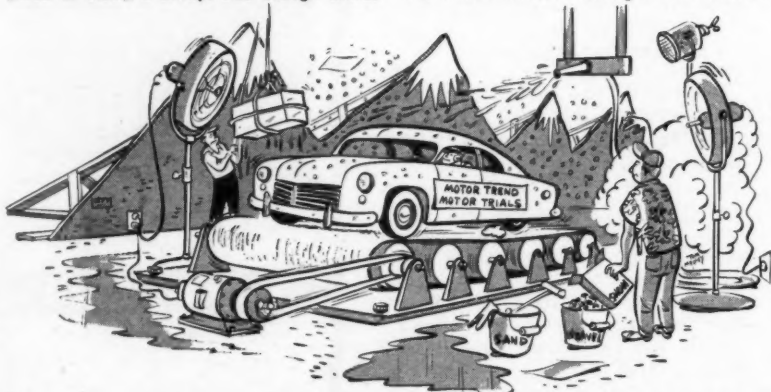
—How about the Joe Barros design on Page 36, Capt. Wells?—Editor

STILL MORE ABOUT MERCERS

Gentlemen:

I wonder whom Mr. C. O. Barnhart of Rome, N. Y., is trying to fool about being in a "1915 Mercer 22-72 touring" ["Reader Reflections," July, 1951]. The car pictured is a 1914 Model 35-M, T-head and not one of the 1915 long-stroke L-heads. Mr. Barnhart is even mistaken on his model number. The 1915 Mercer was the 22-70. The 22-72 came out in either 1916 or 1917.

If Mr. Barnhart actually owned the car illustrated, he certainly must have neglected his brakes. In 50,000 miles of driving T-heads (three of them), I always had enough brakes



to lock my wheels. With proper attention, there was never any "question of whether or not you had any" brakes. I can agree wholeheartedly only with Mr. Barnhart's statement that there is no thrill today comparable to driving a Mercer (T-head, of course) on Sunday or any other day.

Calhoun T. Lyford
Port Washington, N. Y.

HURRAY FOR HUDSON

Gentlemen:

Since writing to you and previous to the appearance of my letter in your column ("Sound Off"—August 1951), the Hudson Company has furnished me with a complete new engine. It was found that a defective thermostat caused the engine to overheat at road speeds and ruined the engine. Hard starting was probably due to burnt valves caused by the overheating. The factory representative explained that the defective thermostat was the cause of the heater and defroster complaint. The gas gauge has been replaced, but the dealer has not received a temperature gauge yet.

The Hudson Co. has given me a new engine and is trying to see that I am satisfied.

Le Roy Miller
Underwood, N. D.

DIFFERING ON THE DIFFERENTIAL

Gentlemen:

One remark about "Duster Days" in the July issue, as doubtless you will receive letters from readers on it. The differential was by no means invented by Daimler, being by his time perhaps a century old. So far as I know, it was invented by the great Frenchman, Pequeur, and he patented it April 25, 1828. Some sources credit Hill, in England, at a later date, but are wrong. Pequeur seems to have the weight of opinion, but in my fuzzy memory, I think someone like Leonardo da Vinci sketched one up during the Renaissance.

Also, wheel steering was used on steam road carriages in England in the earlier part of the 19th century, and, of course, most of these carriages were closed, resembling stagecoaches in a general way. Over here, Amoskeag self-propelled fire engines had wheel steering in the modern way as early as about 1872.

P. S. de Beaumont
North Stonington, Conn.

—This may sound deferential, but you're undoubtedly right.—Editor

BABY, IT'S COLD OUTSIDE

Gentlemen:

I feel that your "Motor Trials" leave out the most important thing of all. None of these fancy cars you test are any good to us in the interior—Minnesota—unless we can keep warm in them in the winter. Those Bel Airs and Diplomats, etc., look all right among the palm trees, but they look ridiculous in a snowbank. I don't much care what the rpm of the spare tire is or the cu. in. displacement of the fog lights. I want to know if I can take a trip in the winter without wearing all the clothes I

own. I realize that a test of this sort would be difficult in California but it seems to me that you can make some kind of comparison.

D. C. Nelson
Canby, Minn.

—As you can see, Mr. Nelson, the cost of duplicating your climate is prohibitive.—Editor

(Continued on page eleven)



ARE ALL
YOU NEED
TO INSTALL
The *Belond*
EQUA-FLOW
Exhaust System



If you enjoy tinkering with your car and can make minor adjustments and installations, then the addition of the Equa-Flow Exhaust System should present no great problem. Many proud owners have made their own installations with simple tools. Although this method may require more time, the results are just as satisfactory as though special equipment is used.

In a few cases, holes must be cut in the frame to allow installation of the Dual side Tail pipe and Extension, however, this will not weaken the frame and any welding shop can do this cutting for you. If necessary, a hand power drill may be used, cutting a series of holes to complete the operation.

Belond Equa-Flow Exhaust Systems can be supplied complete with Mello-Tone Mufflers or less Mufflers so that another Stock Muffler may be used in conjunction with your present right side Muffler. This combination results in very little loss of efficiency and has the advantage of a quiet tone. The Stock Muffler system is the most suitable for Oldsmobiles due to the fact that the Oldsmobile engine produces excessive noise with any steel packed muffler. With Fords and Mercurys, the type of Muffler is a matter of individual choice. Belond Equa-Flow Exhaust Systems contain all parts needed for installation such as: Exhaust Headers, Extensions to Mufflers, Dual side Tailpipe, Clamps, Bolts, Gaskets and two Mello-Tone Mufflers except when ordered less Mufflers. If your car is already equipped with Dual Mufflers, Exhaust Headers and Extensions to Mufflers may be purchased separately.

Other Belond Products

MELLO-TONE SINGLE MUFFLERS

1935-41 V8	\$5.70	1936-41 Plym.	\$5.70
1942-51 V8	6.60	1942-48 Plym.	6.60
1939-41 Merc.	5.70	1949-51 Plym.	7.20
1942-51 Merc.	6.60	1937-48 Buick	7.20
1937-51 Chev.	5.70	1949-51 Buick	7.50



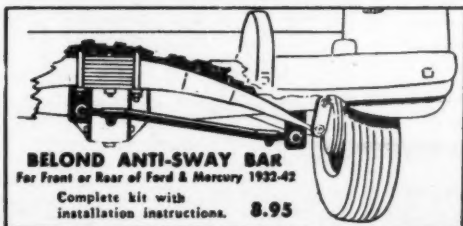
The above are only a few of the cars for which we have Mufflers.

These Mufflers are straight through steel packed Mufflers and are designed to give a deep Mello-Tone Exhaust sound to all cars. Made of heavy gauge steel, they are blow out proof. Use of these Mufflers tends to reduce back pressure to some extent even when used singly.

MELLO-TONE DUAL MUFFLER SETS

1935-48 Ford V8	\$23.00	1950-51 Cadillac V8 (With Hyd.) ..	\$42.50
1949-51 Ford V8	27.00	1949-51 Oldsmobile 88 & 98	32.50
1939-48 Mercury	23.00	1949-51 Lincoln V8 (With Hyd.) ..	32.50
1949-51 Mercury	25.00		

Mello-Tone Dual Muffler Sets are provided for those who wish to reduce back pressure as much as is possible without the addition of Exhaust Headers. Dual Muffler Sets produce satisfactory results at a low cost and can be used in conjunction with Exhaust headers which may be added at any time.



BELOND ANTI-SWAY BAR
For Front or Rear of Ford & Mercury 1932-42
Complete kit with
installation instructions. **8.95**

Back Pressure robs V8 engines of valuable Horsepower. By replacing the standard congested exhaust system with the Belond Equa-Flow Exhaust System, Back Pressure is eliminated and, in most cases, approximately 10% additional Horsepower is transmitted to the rear wheels. Naturally, when increased efficiency is obtained, more speed, better mileage and smoother performance are to be expected.

With these results, we believe that the BELOND EQUA-FLOW Exhaust System is the best single improvement that you can make on your car.

	WITH MELLO-TONE MUFFLERS	LESS MUFFLERS
● Ford V8 or Mercury, 1935-51	\$52.50	\$44.50
● Oldsmobile 88 & 98, 1949-51	\$74.50	\$67.50
	(Quite Loud)	
● Lincoln V8, 1949-51	\$74.50	\$67.50
	(Small, with Hydramatic only)	

CLIP AND MAIL

Southern California **MUFFLER COMPANY**

11039-49 WASHINGTON BLVD., CULVER CITY 1, CALIF.
PHONE VERmont 9-7038, TEXas 0-3885

Please Ship at Once:

EQUA-FLOW Exhaust Systems Complete with Mello-Tone Mufflers
FORD V8 or MERCURY, 52.50 ☐ OLDSMOBILE 88 & 98, 74.50 ☐
Lincoln V8 with Hydramatic, 74.50 ☐

EQUA-FLOW Exhaust Systems Less Mufflers (for use with stock mufflers)

FORD V8 or MERCURY, 44.50 ☐ OLDSMOBILE 88 & 98, 67.50 ☐
LINCOLN V8 with Hydramatic, 67.50 ☐

☐ Single Muffler \$ _____ Anti-Sway Bar Kit (REAR) \$ _____
☐ Dual Muffler Set \$ _____ (FRONT) \$ _____

All prices f.o.b. Culver City, if you live in Calif., add 3% sales tax.

☐ Check or money order in full enclosed.

☐ 50% deposit enclosed, ship, balance C.O.D.

My Car is:

Kind of Transmission
(very important)

Make Year Model Body Style

PRINT NAME AND ADDRESS CLEARLY IN MARGIN

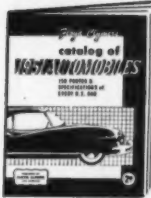
Floyd Clymer's POPULAR MOTOR BOOKS

THE MODERN CHASSIS



Here is a new, informative handbook just off the press. Has interesting, valuable data concerning all phases of chassis construction, modern practices in suspension, shock absorbers, steering, weight distribution, & allied subjects. Deals with U.S. & foreign cars. A very handy book for sport car enthusiast, hot rod, or stock car owner. 112 pages illustrated, over 160 charts, drawings, photos. Attractive 3-color cover. Ppd. 2.00

CATALOG OF 1951 U.S. AUTOMOBILES



Another annual revision of Floyd Clymer's catalog series. Full coverage of every stock production car made in America today. Contains descriptive data on new sports cars—the Cunningham, Muntz, & Nash Healey, as well as informative charts, specifications, comparative prices, interesting service data. 130 sharp photos show nearly every available body style. 80 pgs., attractive 2-color leatherette cover. Postpaid. \$2.00

CATALOG OF 1951 BRITISH CARS

The latest most complete survey of all 53 new British cars. Contains full details, specifications, body styles. New Ford Consul and Zephyr models, and newest sports cars are included. Size 8 1/2 x 11 ins., 112 pgs., over 170 illustrations, photos, ppd. \$2.00

FLOYD CLYMER, PUBLISHER
1268 S. Alvarado St., Los Angeles 6, Calif.

ORDER BLANK ALL BOOKS POSTPAID

SEND FOR FREE MOTORBOOK CATALOG FLOYD CLYMER MOTORBOOKS

1268 S. Alvarado, MT-10, L.A. 6, Calif.

Please send books marked ☒ to:

NAME _____

ADDRESS _____

CITY & STATE _____

READ FLOYD CLYMER'S AUTOMOTIVE TEST REPORTS MONTHLY IN POPULAR MECHANICS MAGAZINE

New Clymer Titles

'51 INDIANAPOLIS RACE OFFICIAL YEARBOOK

(With enlarged, authentic technical section included) The complete story of the great 500-mile race held on Memorial Day, 1951 . . . 112 pgs. filled with interesting and informative text, over 300 photos . . . special new section devoted exclusively to technical aspects of the race . . . facts concerning front and rear-drive cars, the successful Meyer-Drake (Offenhauser) racing engine, the story of the fabulous Novi Specials. The many excellent photos, drawings, cartoons, provide an accurate account of the qualifying trials, the race itself, post-race activities and winner Lee Wallard's victory celebration, postpaid. \$1.50
Deluxe Edition, Fabricoid bound, Gold Leaf lettering. \$3.00



DUESENBERG INSTRUCTION BOOK

We offer this 64-pg. reprint for owners & collectors. 25 photos of cars . . . charts, drawings, cutaway views of engine, oiling system, camshaft & valves, instrument panel, chassis, transmission, etc. Data on care & operation of the world-famous Model J "Duesie," with parts numbers & descriptions . . . Order Reprint No. 4JDR . . . postpaid. \$1.50

1951 GRAND CANYON ECONOMY RUN

32 American stock cars competed from Los Angeles, over mountains and desert to Boulder Dam and Death Valley, ending at Grand Canyon. A.A.A. Sanction. 64 pages . . . 150 photos, charts and drawings. Articles by automotive authorities . . . Technical engineering details . . . Rules . . . data each car . . . See how your favorite car performed! . . . Auto Editors' stories . . . famous personalities . . . Travelogue by Clymer . . . photos and data on interesting Boulder Dam and Grand Canyon . . . An impartial, colorful report on world's greatest Economy Test. Postpaid. \$1.50

CATALOG OF 1951 BRITISH MOTORCYCLES

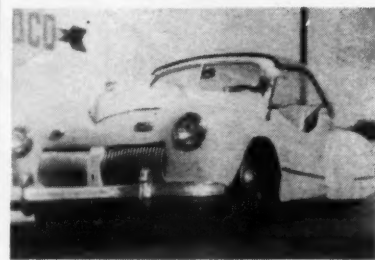
A brand new book of reference, compiled for the enthusiast, owner. Covers every make and model now being built in England—Authentic specifications, performance, historical background of each make. A wealth of interesting data—160 pages, 83 photos. Names and addresses of all British makers, and U.S. distributors. Postpaid. \$2.00

SOUPING THE STOCK ENGINE

Explains fully the 5 PATHS TO POWER. Covers everything from road to track engines . . . effective theories on speed tuning . . . tells you HOW and WHY . . . 150 photos, charts, drawings. Every speed enthusiast will want this ALL-NEW, complete manual of speed by Roger Huntington. 102 pages. Postpaid. 2.00

NEW YORK TO PARIS RACE, 1908—won by the Thomas-Flyer. A real book of automotive Americana. Postpaid. \$1.00

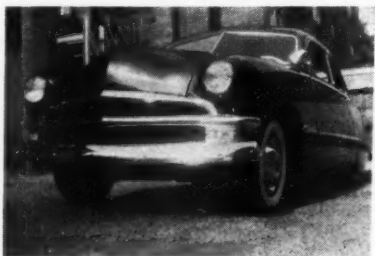
CUSTOM CREATIONS



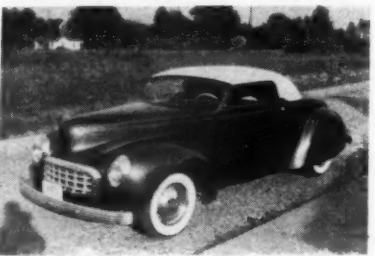
A '36 FORD frame, '42 axle, stabilizer and steering, '39 hydraulic brakes, '42 grille and front fenders, '38 hood, '40 cowl and dash, modified '36 body and '41 rear fenders were combined by Mark W. Wade, Avondale, Penna., to form this attractive hand-built custom car



AN INTERESTING custom car built by Joe Kreul, Rockford, Illinois. It took two years of Joe's time and \$1760 worth of car parts. Car is finished in bright red with dark red upholstery. Continental-type spare wheel mounting is used



SALT LAKE City, Utah, is the home of Johnny Bertolma's restyled '50 Ford club coupe. A '51 top grille piece was fitted below the shaved hood nose. All body seams were leaded, push-button doors, electric window switches added



TWO YEARS and eight months of work went into the construction of Clarence Patterson's '39 Ford convertible. The car was built from parts of many cars: Cadillac, Packard, Plymouth, Lincoln, Mercury, Willys, Pontiac, and Nash. Clarence hails from Glen Allen, Va.

KONG

"ADD-A-POINT" = MAXIMUM PERFORMANCE AND MINIMUM COST

ANY HEAD FOR FIGURES WILL AGREE THAT THIS IS THE BEST POSSIBLE DISTRIBUTOR EQUATION FOR 49-50-51 FORD

- ★ KONG is the kit that is **ACTUALLY EASY TO INSTALL.** (You don't have to take the distributor out of car to install—you don't interfere with the timing!) This is the Finest of Dual Point Conversion Kits.
- ★ KONG is **TRULY DURABLE AND DEPENDABLE.**
- ★ KONG **REALLY INCREASES PERFORMANCE.**

— All Components Ford —

Others may claim—we'll guarantee—no plate wobble using this genuine Ford plate and bushing—and "add-a-point" will save your points.

"ADD-A-POINT" KIT . . . \$5.55

Send for the 1951 SO-CAL CATALOG—with the complete listings of finest speed and power equipment, illustrations, displacement charts, performance hints and the Special Discount slip that saves you \$\$\$.

*Name Registered
Pat. Pending

So-Cal

SPEED SHOP

1104 South Victory Blvd. Burbank, California
Phone: CHarleston 0-4484

Write Dept. M.T.

ANOTHER
TOP PRODUCT
BY KONG,
DIVISION OF
SO-CAL
SPEED SHOP



AB DOES IT AGAIN!

AB JENKINS has done it once again: on July 19 the grand old man of the salt blandly set 12 new speed records which all count in two classes, actually total up to 24.

This was Ab's swan song. Back in '33 he quit architecture in favor of a career in record-smashing speed. That was the year that he first used the Bonneville Salt Flats, *invented* the flats as a course for high-speed runs. That first run of Ab's caused the racing world to drop Daytona as a record course. Ab showed that you could go farther, faster on the salt, due to Bonneville's vast expanse and to the natural osmosis which brings moisture to the surface, keeping tires cool.

This year, under the sponsorship of the Mid-Continent Petroleum Corporation, Ab Jenkins fired up the Mormon Meteor in hopes of doing 200 miles in the hour. It had rained the night before he began his run and the track—a 12½-mile circle that he screams around in one continuous slide—was very slippery. The Meteor went into a violent spin at the beginning of the run, wiping out a number of the wooden pegs that mark the course. It seems that one of these pegs did injury to the car's cooling system and the Meteor's coolant gradually leaked away.

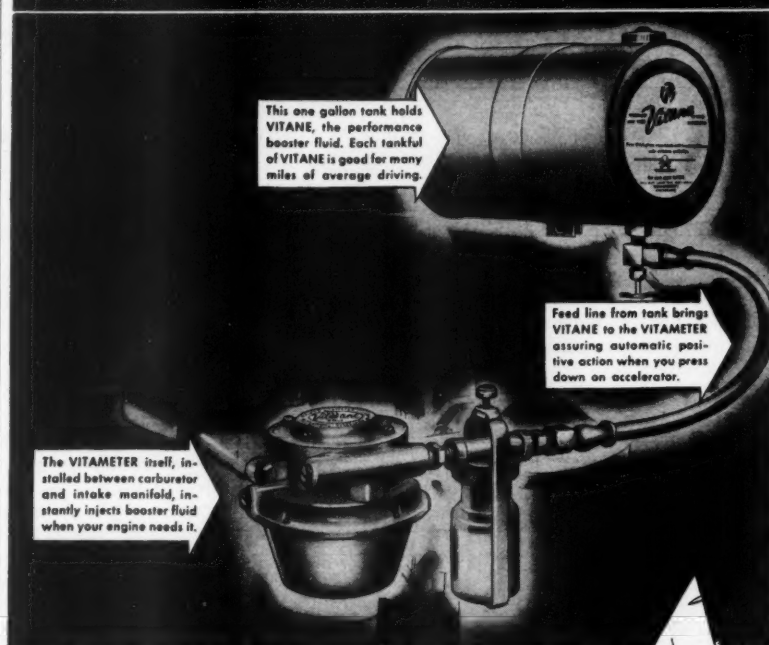
Even so, when 68-year-old Ab climbed from the cockpit of the tired but trusty Meteor, he had made 196 mph for 100 km, added 24 new records to a glittering series of achievements which make him the holder of distance records ranging from 25 km to 48 hours of continuous running. The records made on July 19 are:

World Unlimited Class and International Class A—Standing Start		
Distance	New Record	Old Record
50 km	179.85	172.92
50 mi	185.59	177.26
100 km	187.65	178.64
100 mi	190.65	184.46
200 km	191.54	187.02

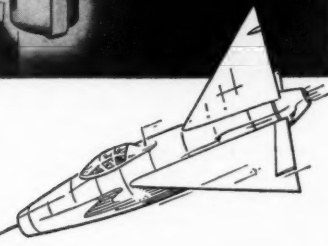
American Unlimited Class and American Class A—Flying Start		
Distance	New Record	Old Record
25 km	196.61	192.43
25 mi	196.69	193.35
50 km	196.67	193.25
50 mi	196.51	194.29
75 km	196.56	194.04
75 mi	195.88	195.61
100 km	196.07	195.06

October 1951

Want JET POWER GO at the touch of the toe?



GET THE Thompson VITAMETER!



THE POWER INJECTOR FOR TODAY'S HIGH PERFORMANCE ENGINES!

Simple to install . . . Average cost of complete kit—only \$37.50.

Backed by millions of miles of road tested service.

Kills Motor Ping. Enables you to advance your spark to best setting, without ping . . . gives you new maximum power from your high compression engine. The *Vitameter* is not a "water" injector, but an automatic device that introduces *Vitane*, a special power-boosting, anti-knock fuel, only when you push hard on the accelerator for full power get-away.

A New Reservoir of Power. Lets you spurt out of tight spots . . . pass when you want to. Here's a new driving thrill with 100—plus octane performance!

Precision-built by Thompson. . . . world's largest manufacturers of automotive and aircraft parts . . . founded in 1901. Written up by SAE Journal and other technical automotive magazines. Now original equipment on the first standard production automobile with 10:1 compression ratio.

-----SEND COUPON FOR ADDITIONAL INFORMATION-----

VITAMETER DIVISION
Thompson Products, Inc.

6402 Cedar Avenue

Cleveland 3, Ohio

Name

Address

City State

Make and Model of My Engine Number of Carburetors

Nine

Spotlight on DETROIT



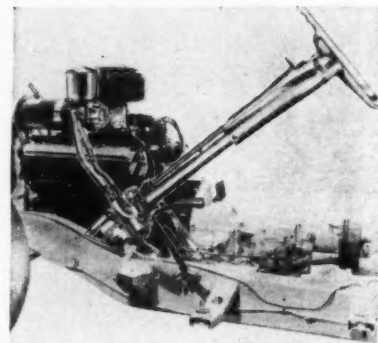
- '52 MODELS DELAYED
- MORE NEW U.S. SPORTS CARS
- SUPER CADILLAC ENGINE

by Harry Cushing

DETROIT, MICHIGAN—This is a city of conflicting reports these hot summer days. Production schedules have been upset. Sales charts are not showing the healthy curves many industry observers would like to record. And, the plans for unveiling 1952 passenger car models have, in many instances, been pushed back from original schedules. . . . At this time a year ago, three new lines had been introduced with customary Detroit fanfare. They were Packard, Kaiser and Henry J. Other previews were just around the corner. . . . Today, not a single 1952 passenger vehicle is ready for presentation. The earliest possible date upon which you may hope to see one is in mid-September. Several cars will not be shown to the general public until well after the first of the year. . . . With the exception of two companies, all plans for 1952 models have been postponed anywhere from a few weeks to as much as three months. Spokesmen for the industry explain that even these dates may have to be shifted by the time of MOTOR TREND's publication date if present conditions do not improve. . . . Many reasons for this upsetting condition are put forth by the auto industry. Most fre-

quently mentioned are government controls which have reduced output by 35 per cent for the last half of the year, delays in getting delivery of new manufacturing tools, serious material shortages, and other problems connected with transferring labor and productive facilities to war work. . . . Only occasionally does someone point a finger to the fact that a number of companies are finding it harder and harder to sell what they do manufacture. A trip around Detroit to substantiate this reveals parking areas adjacent to many dealer's showrooms loaded with cars of every style and color.

UNEMPLOYMENT THREAT: Along with their companies, the men and women who build cars in Detroit appear to be in for harder times in the months immediately ahead. . . . Nearly every authority here agrees that unemployment is a serious Motor City problem until shortly after the first of the year. The only difference of opinion about it being the size. Estimates range from the State of Michigan's figure of 34,000 jobless to the Detroit Board of Commerce's prediction of close to 100,000 out of work. . . . In fact, it is such a major threat to the economy of



CHRYSLER POWER steering gets its drive from a hydraulic pump driven from generator. Power-assisted steering is an engineering landmark

this area that a U.S. Senate Sub-Committee is investigating the situation. The Government officials have been told that Federal policies which deny steel and other materials to the industry are the chief cause. Chrysler, for example, has informed the Senate Investigators it may be forced to close completely in September if more steel is not forthcoming soon. . . . In view of these developments, you may expect to hear of recurring plant shut-downs and reduced work weeks between now and early 1952, when new models and increased war production should take up the slack, according to the experts.

SPORTS CAR WHISPERS: If the rumors prove to be true, at least two Detroit auto makers will introduce sports type cars this fall! So, hats off to a more pleasurable era in American motoring—and Nash, please take a bow for kicking off a worthwhile trend! . . . One of the companies is supposed to be Chrysler, but at least three top executives there have emphatically denied it to your Detroit Editor. . . . However, it is known that Chrysler management is anxiously awaiting the return to this country of four cars sent to Europe some time ago for very extra-special styling treatment. . . . In an experimental vein each of the Corporation's divisions (Plymouth, Dodge, DeSoto and Chrysler) sent a chassis overseas to see what top continental designers would do if given a free hand. Outstanding stylists of the calibre of Pinin Farina were commissioned to do the work, each



NEWEST RESEARCH instrument at Ford plant is this "rough road machine" which pounds cars brutally, aids in pinning down all sources of noise and vibration both by sight and sound

(Continued on page thirty-four)

Reader Reflections

(Continued from page six)

CROWD CONTROL

Gentlemen:

The editorial on crowd control (Sept. 1951) at sports car events was noted. I was a spectator at Watkins Glen last year and being at the back stretches around the stone bridge corner and the end of the straight, I saw a lot of foolish people running all over the course. Particularly after the winning car had passed and before the rest of the entries had finished their last laps.

Peter Fairclough
Toronto, Canada

ORIGIN OF A CLASSIC

Gentlemen:

I was glad to see in the August MOTOR TREND the copy of one of my designs. I refer to the Van Den Plas Victoria on a Packard chassis. As Art Director for the Van Den Plas S.A. Brussels (1923-1928), I originated this design in 1926. Several bodies were built on the Minerva 30 HP chassis, also on Hispanos and Bentleys.

One of these bodies, designed by me and built by Van Den Plas S.A., was exhibited at the 1928 Paris Automobile Show at the Grand Palais on the Packard stand. It is interesting to note that this was one of the first bodies built by Van Den Plas S.A. (known for its conservative tendencies), to have deeply recessed floors (five ins. below the chassis. In 1927 mind you.). This deeply shocked Mr. Alvan Macauley (Chairman of the Board of the Packard Motor Co.), when I demonstrated the car at the 1928 show prior to my departure for the U.S.

Alexis de Sakhnoffsky
Chicago, Ill.

MOBILGAS RUN

Gentlemen:

Here are some of my reflections on the 1951 Mobilgas Economy Run. Don't you think it is very unfair that some cars can use overdrive while others are not in a position to do so? As far as I'm concerned, Plymouth, Dodge, and DeSoto haven't a chance to win without overdrive. I think that all cars should be compelled to use a standard shift or an automatic transmission (as Ford claims to get equal or better mileage with Fordomatic). It is possible that this serious handicap is taken into consideration? It does not look like it, as neither Pontiac, nor Oldsmobile, nor Buick entered the competition. Why not? Is it because these cars cannot be equipped with overdrive? An affirmative answer suggests itself rather obviously. . . .

PFC M. Brun
Wichita Falls, Tex.

—Each manufacturer equips his entry with its best mileage-making devices as available from production and as permitted by AAA rules. Therefore, the choice lies with the manufacturer. Incidentally, the Chrysler Corporation pioneered overdrives on U.S. production cars—Editor.

MEXICAN ROAD RACE

AS WE go to press, official word has just been received from Mexico's National Automobile Association (A.N.A.) that the second Carrera Panamericana Mexico will be held on Nov. 20 through 25. Entries will be limited to 300 cars, there will be over \$69,000 in prize money, and the race this year will be run over the same course, but from the Southern to the Northern border. The next issue of MOTOR TREND will bring you full particulars. Entry information may be had from: Enrique M. Moreno, General Manager, A.N.A., Sullivan Num. 51, Mexico, D.F.



extra friendly service

You feel pretty good about getting out on the highway for a vacation or a Sunday drive when you rely on the friendly, able Mobilgas Dealer. Taking good care of your car is just one of the things he knows quite a bit about. For instance, he knows the sport attractions in his area as well as any one and you can depend on him for good advice on where to go, how to get there, and where to stay. He also knows you'll get more fun out of your trips when your car is brought to top condition. So, start your trips knowing that all is well with the car because your Mobilgas dealer has checked it over. Once on the highway, go all the way with your Mobilgas Dealer—he's extra friendly, extra dependable.



BIG BITE
Westerners pay 3¢ tax
out of every gasoline dollar.



GENERAL PETROLEUM CORPORATION—converting nature's gift to better living.

Your Editor Says... SAFETY VS. HORSEPOWER

WHAT DO WE actually want in cars? Are we looking for more speed, more power, added acceleration, or do we already have enough horsepower for our present needs?

Can the highways, in their present condition, even stand more speed? Shouldn't we place more emphasis on economy, safety and maintenance, and let horsepower work for us, instead of letting it possibly get out of control?

It seems that automotive manufacturers, through the demands of the motoring public, have found themselves in the unenviable position of having to provide more and more horsepower in order to "stay up with the competition." One manufacturer comes out with a high-output engine, and when he eulogizes on the fact, he causes his competitor to "go him one better" with his next design.

Now don't get us wrong, just because we advocate safety doesn't mean that we have an aversion to horsepower, far from it. But, we do believe that *excessive* horsepower made indiscriminately available to *everyone* can lead to a highly undesirable situation. Power is a decided

detriment without a rigid controlling factor behind the wheel.

Discussions of the basic causes contributing to automobile accidents usually wind up with the blame being placed on either the driver or the car—hardly ever are both to blame, at least according to the protagonists. We disagree with this viewpoint, in that we believe they can both stand improvement: one, through driver education; the other, through car improvements.

Until such time as cars are built with more integral safety features, as roads are designed to handle higher speeds, and as every driver becomes familiar with the dormant dangers of high horsepower, we believe that power output should remain where it is, or at least be accompanied by the adoption of new safety features.

Instead of devoting research to ways of increasing speed, we contend that it would be much more reasonable to devote this time to the development of more efficient engines and safer bodies. Additional fuel economy should be a definite goal, while all parts could be designed for longer life and less maintenance.

Safety devices which we would like to see built into cars (not as optional equipment alone) are: more positive steering; a firmer grip steering wheel; a driver's seat position that forces you to remain alert and doesn't put you to sleep, with the seat adjustable up-and-down as well as fore-and-aft; elimination of all blind spots; a wide two-position rear view mirror; a side view mirror; a crash-padded dash panel; a tinted windshield; better instrument visibility (eliminating fatiguing lights); elimination of all glare points on the dash; safety-built doors that lock from the inside; larger, air-cooled brakes; blowout-proof tires; and, a front end that doesn't nosedive with every sudden stop.

This is by no means intended to be a complete list; however, it is a starting point. We realize that it would be impossible to accomplish this change overnight, or even within the next few years. But, if we indicate to the automotive designers and manufacturers that what we want is *safety*, it's a safe bet they'll give it to us, maybe sooner than we think.

—W. W.

FOR EVERY CAR . . . FOR EVERY PURPOSE!



WIN

On road . . . on track . . . on highways . . . K-L-G Spark Plugs, straight from Britain, outperform all others, in America, in Europe, all the world over. They are the favorites of racing drivers everywhere for whom they have been racing from success to success, year after year.

EVENTS WON ON K-L-G

Bonneville . . . Daytona . . . Monte Carlo Rally . . . Victory Cup Trial . . . Scottish Six Days Trial . . . Junior T.T. . . . Dutch Grand Prix . . . Swiss Grand Prix . . . Belgian Grand Prix . . . Ulster Grand Prix . . . Grand Prix des Nations . . . Silverstone . . . North West 200 . . . and a host of others!

Make us your Headquarters for: Smiths' Motor Accessories, Ltd., Joseph Lucas & Co., and Dunlop Rubber and Tire Corp., Parts Products and Service, as well as for MG parts, sales and service.



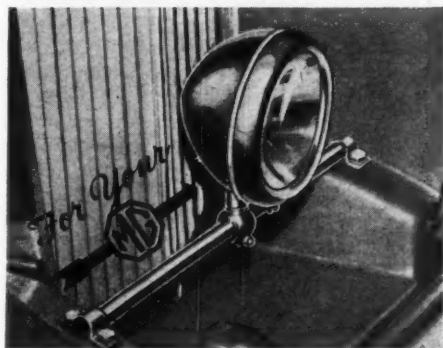
ORDER YOUR K-L-G SPARK PLUGS TODAY
Commercial Standard or Watertight; Corundite Racing Standard or Watertight; Mica Racing; Platinum Point Standard; Also Waterproof Cover P & B Type Terminals. Immediate Delivery.

AUTOACCESSORIES, LTD.
WARSAW, INDIANA, U. S. A.



S. H. ARNOLT, INC.
415 EAST ERIE STREET, CHICAGO 11, ILL.

You'll want this handsome light for your now! ARNO-LITE DRIVING LIGHT or SPOTLIGHT



Your Choice of Flood or Spotlight
with either Amber or Clear Lens

A handsome as well as a practical and SAFETY-WISE addition to your MG TD roadster. ARNO-LITE was built just for you . . . with choice of beam that's either a long, sweeping flood, or a sharp piercing spot, with either amber (fog) or clear lens for both. Designed for a low position, central (TC or TD) badge bar mounting . . . with full horizontal adjustment for accurate, fixed positioning to all driving conditions . . . for safety always on straight-away, curves or hills. ARNO-LITE'S usefulness is matched by the superb beauty of its graceful shape and gleaming chrome finish. Its easy to install.

Write or Wire for Complete Information and Prices NOW!

NOW...EVERYTHING FOR YOUR MG—FROM ONE SOURCE!

Send for this NEW 1951 Illustrated Catalog Today →

Mail 25c today for your copy of the new Catalog and Price List. Fully describes EVERYTHING FOR YOUR MG—FROM THIS ONE DEPENDABLE SOURCE. Tailored MG Accessories include: Convertible type windings and aero windcreens—polished cast aluminum valve covers and inspection plates—TD badge bars—ARNO-LITE driving lights and spotlights—heaters—assist grips, steering wheel medallions—arm rest glove compartments, etc.

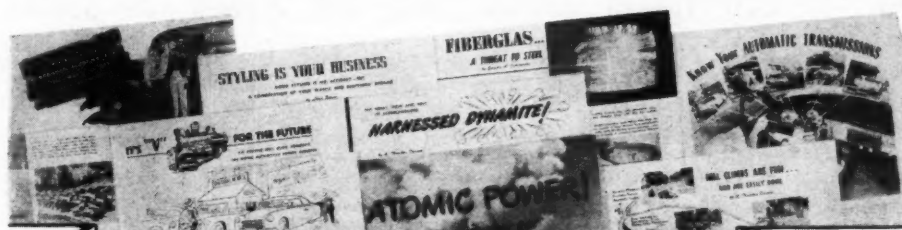
Make us your Headquarters for: Smiths' Motor Accessories, Ltd., Joseph Lucas & Co., and Dunlop Rubber and Tire Corp. Parts, Products and Service, as well as for MG parts, sales and service.



AUTOCESSORIES, LTD.
WARSAW, INDIANA, U. S. A.



S. H. ARNOLT, INC.
415 EAST ERIE STREET, CHICAGO 11, ILL.



MISS ANY OF THESE FEATURES ?

Styling is Your Business—Buying a Classic Car?	Sept. 50
Know Your Automatic Transmissions—Fiberglass, A Threat to Steel	Oct. 50
Designed to Beat the Devil (a car interior meant for safety)—It's "V" For the Future	Nov. 50
Diesels at Speed—Hill Climbs Are Fun	Dec. 50
Polishes; Do You Polish and Wax Your Own Car?—Harnessing Dynamite; Supercharging	Jan. 51
Front or Rear Engines?—Painting Your Car?	Feb. 51
Detroit Speaks (Statements from industry leaders)—This Changing World (automotive progress 1920-51)	Mar. 51
Atomic Power; In Your Car—Miniature Le Mans	Apr. 51
Beware of Used Cars—Daytona; Beach of Speed	May 51
World Car Survey; Rate Your Own Car—Good Fuel Economy is Possible	June 51
The Rebuilt Engine Racket—Your Own Shop: At Little Cost	July 51
You Run Detroit—Indianapolis from the Pits	Aug. 51
Battle of the Octanes—Stock Car Records	Sept. 51

The back issues of MOTOR TREND containing these features are available—check your order on this coupon. When ordering your copies, have them sent in a special 12 copy MOTOR TREND Binder—the best way to file them for easy reference.

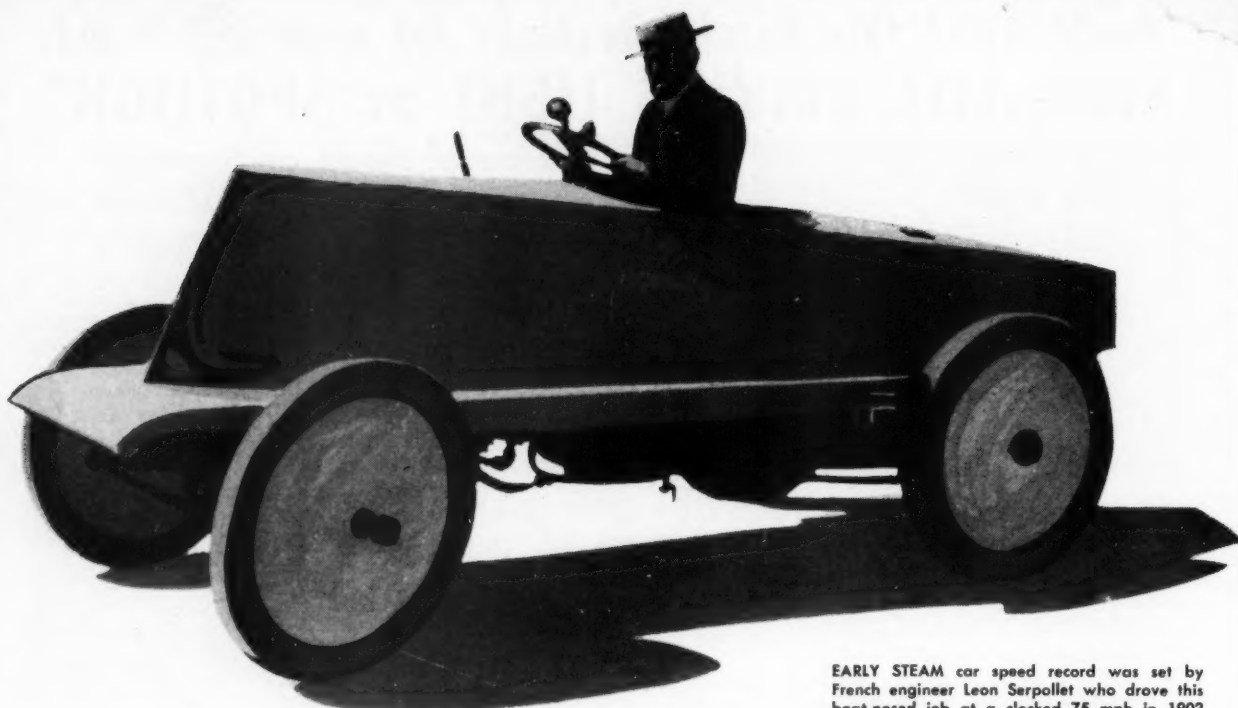
October 1951

MOTOR TREND, Dept. 10
1015 S. La Cienega Blvd., Los Angeles 35, Calif.
I enclose \$_____ for _____ issues at 25c each.
\$_____ for _____ Binders at \$2.00 each.

1951		1950		1949	
Feb.	<input type="checkbox"/>	Jun.	<input type="checkbox"/>	Oct.	<input type="checkbox"/>
Mar.	<input type="checkbox"/>	Jul.	<input type="checkbox"/>	Nov.	<input type="checkbox"/>
Apr.	<input type="checkbox"/>	Aug.	<input type="checkbox"/>	Dec.	<input type="checkbox"/>
May	<input type="checkbox"/>	Sep.	<input type="checkbox"/>	Jan.	<input type="checkbox"/>
Jun.	<input type="checkbox"/>	Oct.	<input type="checkbox"/>	Feb.	<input type="checkbox"/>
Jul.	<input type="checkbox"/>	Nov.	<input type="checkbox"/>	Mar.	<input type="checkbox"/>
Aug.	<input type="checkbox"/>	Dec.	<input type="checkbox"/>	Apr.	<input type="checkbox"/>
Sep.	<input type="checkbox"/>	Jan.	<input type="checkbox"/>	May	<input type="checkbox"/>

name _____
address _____
city _____ zone _____ state _____

Thirteen



EARLY STEAM car speed record was set by French engineer Leon Serpollet who drove this boat-nosed job at a clocked 75 mph in 1902

THE STEAM CAR SPEED LEGEND

by *Malcom Andrews*

ILLUSTRATIONS BY DON FELL, BASED ON PHOTOS
FROM EARL FANCHER COLLECTION

OLD TIMERS ARGUE THAT THE POWER OF STEAM
HAS NO LIMIT . . . BUT WHERE IS STEAM TODAY?

IN THE fission-and-fusion-conscious 1950s, the youngsters can only speak of atomic-powered cars, land jets, gas turbines and tapping the magnetic lines of force that bind our planet in its position in the solar system. Steam is for grandpa. Well, kids, this is all very fine and flying jets are breaking the sonic barrier as a matter of course. But steam isn't exactly dead either. In fact there is a small segment of the population who predict that it will return to wipe these stinking gas buggies right off the highways. Do it with

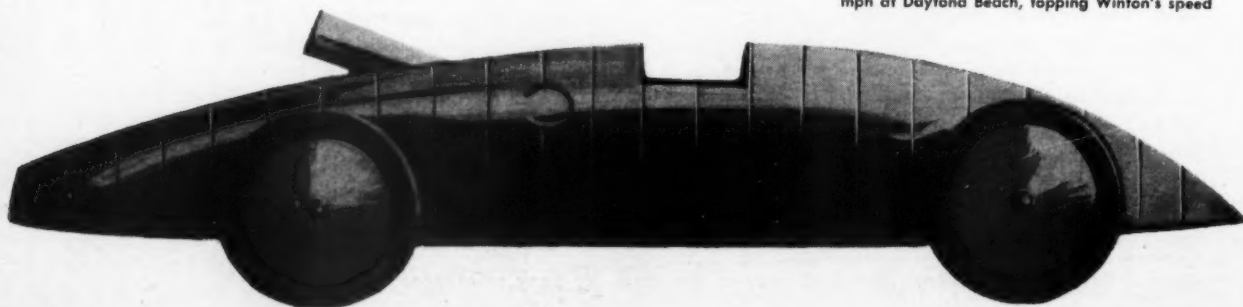
speed, as well as with economy and silence. After all, Fred Marriott pushed his 1400 lb. Stanley Rocket to 197 mph on Ormond Beach, Florida, before he caught a gust of wind under the flat belly of the wooden body and did a sluggish barrel-roll in the air. And he was using a two-cylinder engine driven by a boiler no bigger than the tub of your home washing machine. It was 32 years later that Sir Malcolm Campbell made his 369.7 mph using a power plant big enough to light a city.

Just think what the record would be

today if all the research spent developing the internal-combustion engine had been lavished on steam-propelled vehicles! Or, at least, the tight little knot of steam maniacs would like to have you dwell on that thought for a while.

It is certainly true that in the early days of steam, the gasoline engine was not much good. The Stanley brothers had no trouble copping hill-climb and speed events with their cars. In 1903, a tiny Stanley whipped such competition as Peerless, Darracq, Winton, Packard, Stevens-

IN 1905, Louis Ross captured the mile record in this highly streamlined Stanley by doing 94.73 mph at Daytona Beach, topping Winton's speed



Duryea in a timed climb up Commonwealth avenue in Boston. In Denver two years later, a Stanley defeated a Daimler.

Of course the gasoline engine was new in those years and the steam engine had a century and a half more or less of development behind it. Cugnot built his machine in 1769 and the engine was based on previously discovered principles. In the first decade of the twentieth century the steam engine was at a crucial turning point. For some reason it didn't take the right path.

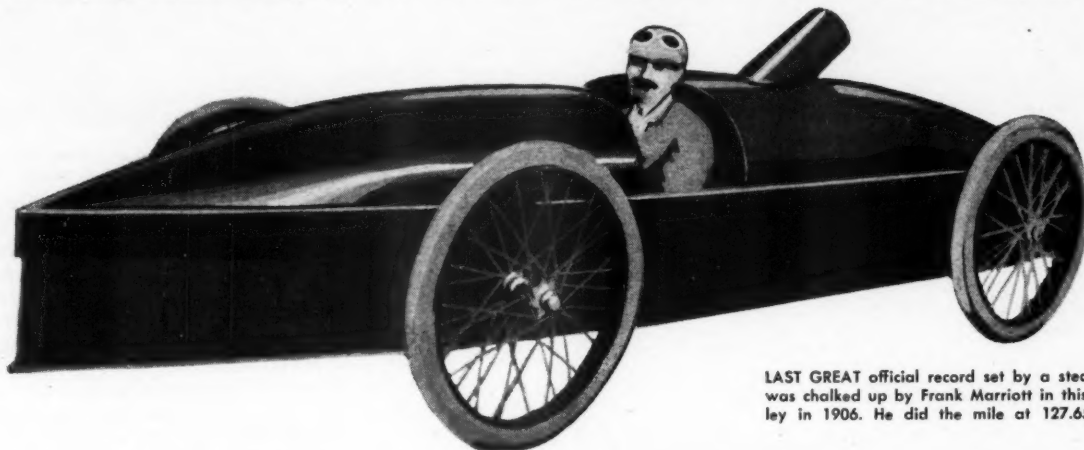
The best and most familiar speed legend was started by some unknown romancer late in the Stanleys' career. It was reported

risk his neck. After the disastrous run at Ormond Beach when Fred Marriott was seriously injured, no more attempts were made to set speed records. Too dangerous, was the verdict.

If anyone actually tried the 60 sec. test, chances are that he simply shut the throttle down when the minute was up. And he probably didn't go much faster than 75 mph. The throttle controls the flow of steam into the tiny, horizontally mounted engine—not the pressure in the boiler. Stanleys operate at 600 pounds per sq. in. For his near-fatal run at the record, Fred Marriott used a pressure of

engines, the steam car wouldn't have a chance in a long race. Even with the flash boilers it was difficult to keep a steady steam pressure with a wide-open throttle. For the first few miles the speed would be excellent but then it would be necessary to wait for more steam to cook. This also explodes the theory of the exploding boiler. As a matter of cold fact, it was impossible to blow a well-constructed boiler. The Stanleys tried it once and the tubes inside the boiler collapsed, thus venting the stored steam before an explosion could take place.

Steam-powered automobiles lost favor



LAST GREAT official record set by a steam car was chalked up by Frank Marriott in this Stanley in 1906. He did the mile at 127.65 mph

that there was a free Stanley waiting for the intrepid gentleman who would hold the throttle of any Stanley Steamer wide open for 60 secs. Presumably the risks were so great that no one dared to take the chance. Or perhaps those who had tried had been blown off the face of the earth by the overtaxed boiler. At any rate no steamers were claimed.

The solid fact is that no such offer was ever made. In the first place there was a waiting list for Stanleys and it was not necessary to give away any of the production. Then, too, the Stanley brothers never advertised and this sort of promotion reeks of the huckster touch. Nor were the manufacturers the type to encourage anyone to

1300 psi. The year before, when he set five world records, he was running at eight or nine hundred lbs. That was 1906, and the records were for one, two, and five miles; one mile in competition; one kilometer. The speed for the mile run was 127.66 mph—the first official run at more than two miles per minute.

Other steamers raced in those days, too. The White Company, makers of the White Elephant, had a low-slung job called the Whistling Billy, which competed successfully in dirt-track racing early in the century. In all there were at least 125 different makes of steam cars and many of them entered speed events.

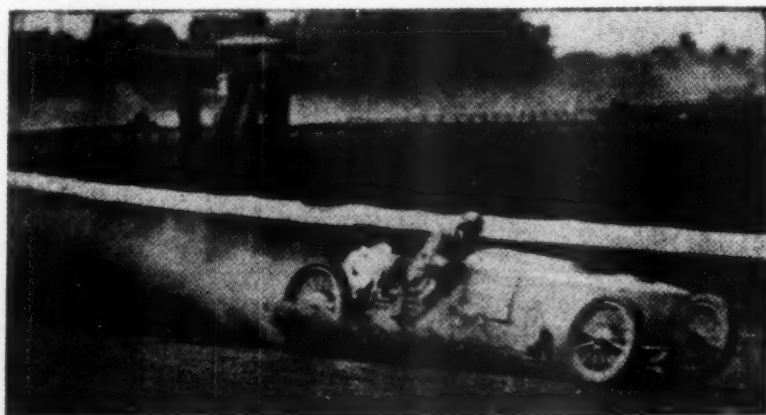
In these days of highly efficient gasoline

rapidly when the self-starter made its appearance. At that time the process of starting a cold steam engine required a blowtorch and much patience. Soon the demand for steamers dropped off to nothing, and the last manufacturer, Doble, gave up the struggle in the early thirties.

But steam does have one asset the gasoline engine cannot have. With all our Fluid Drives and Hydraulics, we do not yet have a gasoline engine with the low-speed power of the steam engine. Crack the throttle on a Doble or a White and you move out smoothly. Lug down to a crawl on a steep hill and there is no jerk from the engine. If you like to burn rubber on your getaway, nothing will give you the impact of steam. Simply hold the brake tight and open the throttle. The steam pressure will build up to 600 lbs. against the head of the piston. Then snap off the brake and hold on tight.

If you'd like to try steam power, try to find yourself an old steamer and restore it. They're really not hard to come by. You'll find an admirable step-by-step account of such an experiment in *The Story of a Stanley Steamer* by George Woodbury. (W. W. Norton & Co., Inc., New York.) Woodbury emerged from his experience with more respect for steam than gasoline. Perhaps you will, too.

ANCIENT PHOTO shows Webb Jay at the wheel of White steamer racer, "Whistling Billy." Jay was king of the dirt tracks in 1905, beat the front-drive Christie and the Fiats consistently



**MOTOR
TRIAL**

BUICK



BUICK HAS LOOKS, PLUSH RIDE AT MODERATE PRICE

by Griff Borgeson

PHOTOS BY E. RICKMAN

FOURTH LARGEST seller among American cars—that's the Buick. It's one of those cars that is usually admired or detested on sight and Buick owners are notable for their pride of possession. Why this devotion or dislike? What are this car's successes and failures? As always, this depends upon your own point of view.

Buick is a highly successful car in terms of fulfilling the function for which it was specifically designed. That function is to appeal to and satisfy the buyer for whom performance and economy are secondary to comfort and luxurious appearance. General Motors, it seems, has targeted the Buick line perfectly at those consumers whose taste runs to the lush opulence of the Cadillac, but is tempered by a desire to avoid the heavy investment, the higher depreciation and maintenance that the Caddie entails.

Buick's remarkable hold on the American and world market has held MOTOR TREND Research's interest for a long time. We've been fully aware of the already-described strong points but, never having subjected a Buick to a thoroughgoing Motor Trial, it was with plenty of genuine anticipation that we cleared through the factory and obtained official authorization to put one of their products on our dissecting board. Wessen Buick Co. of Los Angeles supplied us with a well broken-in Special four-door sedan, we hooked up our test equipment and were on our way.

RIDE: Buick ride has been greatly

improved in the '51 models. The springs are still extremely soft but are now compensated to produce almost none of the pitch and roll that marked earlier versions of this type of suspension. Bottoming of the rear springs still takes place on severe dips and bumps. But let's make this point as emphatic as possible: all-in-all, the Buick ride is an adventure in luxurious moving about. If you like that—and millions of motorists do—you can't beat Buick. We don't recommend taking the corners too fast, though. During really speedy cornering the rear tires break traction with startling suddenness, the rear end of the car tending to snap outward in the direction of the centrifugal force.

TOP SPEED: Our flat-out runs were made at El Mirage dry lake when the thermometer stood at 116 degrees—a condition that definitely hampers the volumetric efficiency of any engine. Our fastest run in the Buick Special was 89.1 mph and it's safe to say that with a less roasting temperature another three mph could be expected from this car.

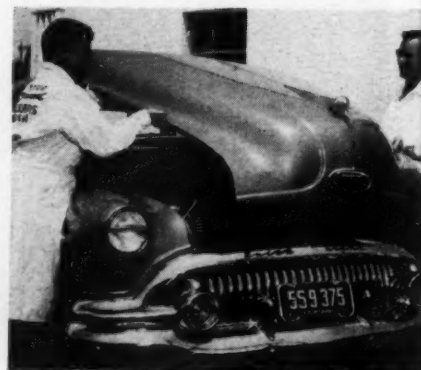
During these top speed runs "wheel tramp"—a thumping effect often noted with large cross-section tires—was quite pronounced. It was notable that the Buick engine revved up to its peak output right away. We tried to wind the power plant even tighter by making extra long runs, but this proved unnecessary. The 120 bhp engine's power curve is evidently quite straight.

ACCELERATION: Buick's torque

IMPROVED SPRINGING is demonstrated here as Buick Special corners at 50 mph, remains remarkably flat in spite of its super-soft ride

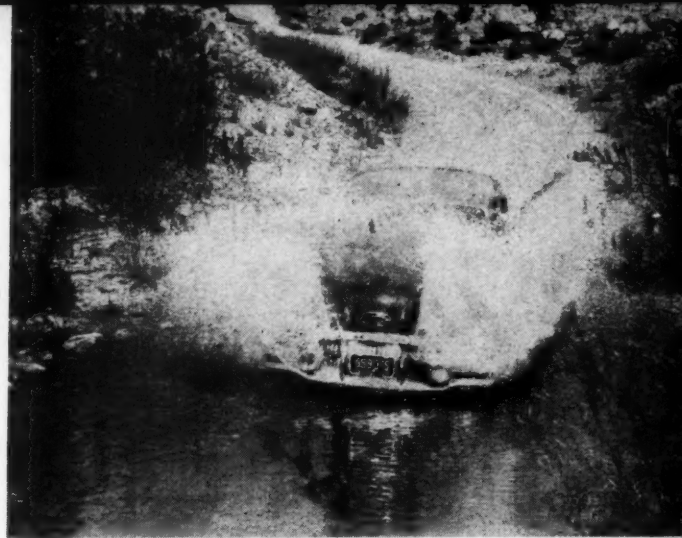
converter transmission has really undergone great improvement. Like all automatic transmissions and hydraulic couplings, there is slippage and a resulting penalty as far as efficiency is concerned. Dynaflo is absolutely a great step ahead in automotive engineering. It is still far from perfect—still the fluid coupling is not positive enough. Starting from standstill, the engine thrashes, wasting revs by the thousands. And if you start out in DRIVE range, when the rear wheels do begin to echo the engine's urge, you only creep while Model As go flashing by. However, as soon as the car's static inertia is overcome and momentum has been gained, you can hold your own perfectly well in any kind of traffic.

Dynaflo's greatest asset is, of course, the fact that you can drop into DRIVE and forget about shifting all day. But if you're interested in getting around quickly and use the LOW-DRIVE shift lever properly, you can be among the first on the getaway at every traffic signal. There's fine acceleration to be had in LOW and, by using this for starts, dropping into DRIVE at 30 mph or so for cruising, popping back into LOW whenever gobs of GO





STORMING ACROSS El Mirage dry lake, Buick's top clocked speed was 89.1 mph. Thermometer was at 116 degrees but engine did not overheat



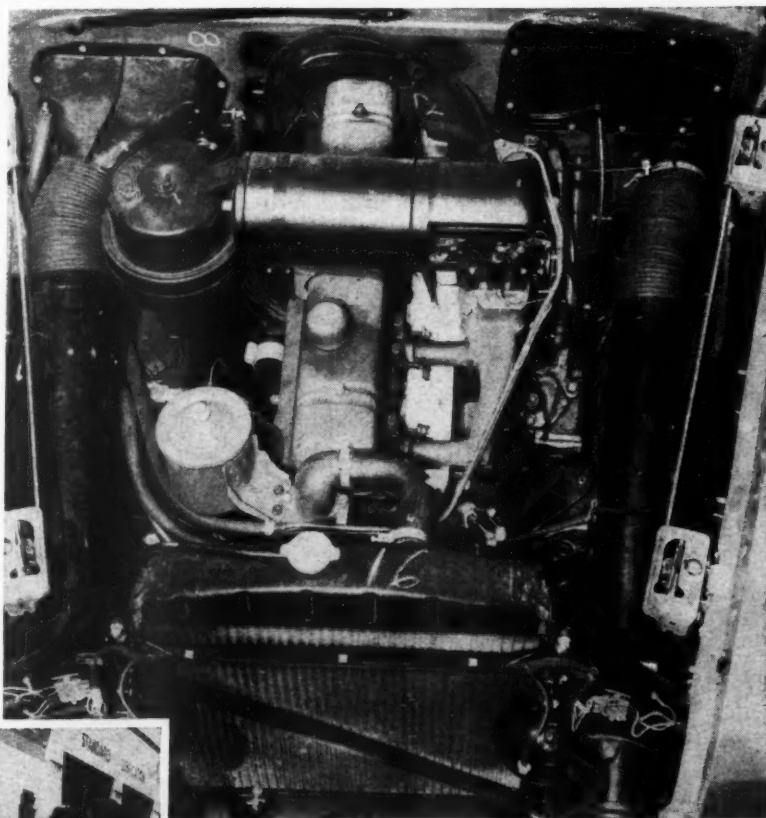
FORDING FIVE-in. stream at 15 mph simulates flooded street conditions in rainy weather. Ventilating system, horns shipped considerable water

are required, you can make the Buick perform as a very sprightly car indeed. But to do this you must lead-foot it all the way and pay the price in fuel consumption.

Glancing at the "Table of Performance," you'll see that in every clocked run, starting in the LOW range chopped about three secs. from the time made in DRIVE for the same run. Even so, and in spite of DRIVE's sluggish getaway, overall times in DRIVE work out rather well thanks to the fact that there are no gears to change. And in some cars with automatic transmissions, each change can consume about two secs. Torque converter transmissions, in spite of their few shortcomings, stack up quite well against other automatic setups. They are convenient and will win growing millions of motorists to their side, particularly as torque converter design progresses.

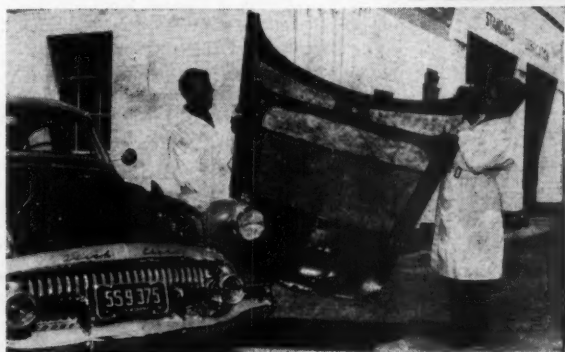
STEERING: In spite of its many turns from full left to full right, the steering cannot be described as light; a strong arm is an asset in keeping the Buick on the beam. The car skates and wobbles

(Continued on page forty)



ENGINE SPACE is extremely large, yet fully utilized. Latches which permit easy removal of hood are on each side, just above vent ducts

ULTIMATE IN accessibility for the mechanic is furnished by Buick's removable hood feature. Entire panel can be lifted away easily when two hood latches are released, as shown in two photos at left





THE SUPREME SPORTS CAR SUPERCHARGED OFFY-CISITALIA MAY BE WORLD'S FASTEST 91-IN. MACHINE

by Richard H. Rush

ALTHOUGH THE Offenhauser-Cisitalia has never been given an official name it probably deserves, more than any other, the name Pesco Special, for it was through the painstaking efforts of the Borg-Warner Corporation, Pesco Products Division, that this car began to realize the dream of all those who labored long and hard to make it the outstanding under-1500 cc machine in this country.

The objective of the Offenhauser-Cisitalia was to see what could be done with the specific limitation of an engine under 1500 cc. This is a standard road racing category. Limitations, such as those imposed on Indianapolis cars and other American track cars, test ingenuity and mechanical skill far more than a "sky's the limit" rule.

With this limitation the next thing was

to find the finest small chassis obtainable in the world. The Cisitalia was a natural selection. The car was designed from scratch postwar by Dr. Porsche of German Auto Union and Mercedes-Benz fame. There was and is nothing as supremely successful in this size category as the Cisitalia. It has a tubular chassis. The wheelbase to tread ratio and its low center of gravity give it almost unbelievable cornering abilities. It utilizes magnesium extensively in the wire wheels, brake drums and other parts of the unsprung weight. This unsprung lightness glues it to the road and gives the car extreme flexibility.

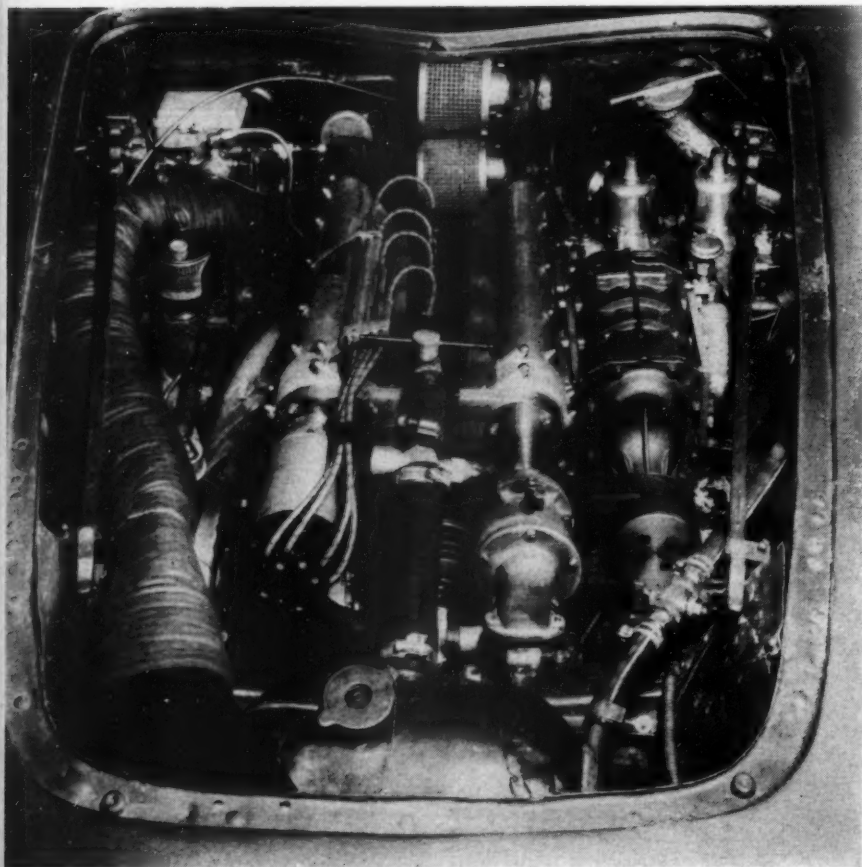
One advantage too often overlooked in sports car design is small size. The smaller, the less wind resistance, and the lighter, the less load for the engine to haul. The frontal area too is held to a minimum, and although the advantage of low frontal area is well known in aircraft and guided missile design, it is not so well recognized in sports car design. The brakes are superb and the Cisitalia comes equipped with body by Pinin Farina, than which there is none finer nor more beautiful in its simplicity.

It did not take long to decide to employ the Meyer-Drake Offy engine, to all intents and purposes the *only* American racing engine. It is not surprising to hear that a track race is won by an Offy. It is news indeed in an important meet when anything else wins. This success holds true in midget racing, 220 cu. in. racing and at Indianapolis.

This engine has only four cylinders, and the fewer there are the more rugged each piston and assembly are and the fewer are the parts to get out of order. The principal advantage of the leading European sports car engine—the Ferrari—is that its 12 cylinders give it enormous piston area in relation to its total displacement, and 12 cylinders mean smoothness. But the Ferrari is complicated, and the Offy is not. Those brought up in the Mercedes-Benz and Bugatti traditions know the tremendous advantages of simplicity, provided a simple engine will do the job, as the Offy will.

No fewer than 4000 hours of labor went into installation of the engine and attendant jobs. The Offy is a power plant meant for but one purpose: track racing. It was never intended for idling at 500 rpm. It came equipped with Riley carburetors which are able to coax more rpm out of the engines than any other carburetors. But they will not perform efficiently under 40 mph. They do not need to. No track races utilize speeds of under 40 or those low speeds encountered in road

(Continued on page thirty-two)



MAKING THE most of every inch, both inside the engine and out, the fantastic Cisitalia-Offy pulls better than 160 bhp from a mere 91 ins.

IF YOU OWN A CAR YOU CAN ORGANIZE A CLUB FOR FUN AND FELLOWSHIP



PHOTOS BY E. RICKMAN

CAR CLUBS...

by Dick van Osten

NOTE: In the search for material for this article, we discovered a car club believed to be an outstanding example of organization, activity, and purpose. The Cavaliers of Long Beach, California, are long overdue for the recognition they deserve. If those of you who have written us requesting this article are successful in reaching the organizational peak of the Cavaliers, you are to be congratulated.—Editor

NATIONAL INTEREST in all things automotive is snowballing. Hundreds of car clubs have sprung up throughout the United States since the end of World War II. Many have developed into very large organizations, pyramiding up to a parent association, usually incorporated and combining a group of clubs. The success of such groups is dependent solely upon the efforts of the members and their sincerity in these efforts.

Here's what Curt Kruse, Vice-President of the Cavaliers, and Vice-Chairman of the Associated Car Clubs of Long Beach, California, has to say about the prime requisites for a successful club.

"First, the fellows planning to start a club must have the same interests, as far as cars are concerned. They must be willing to work, and work hard, making the club function and hold together. As a general rule, the charter members are the ones who will work the hardest to keep everything going.

"Second, a good constitution, charter, and by-laws must be written. If properly done, it will cover anything that may concern the club. This is not only important as a starting point, but it will become more and more useful as the club progresses.

"Third, there must always be plans to maintain the general interest of the members. As long as there are plenty of activities in which all may take part, interest will never lag. A lack of interest is probably the greatest downfall of most clubs.

"Other important items to consider are: capable officers, a comfortable place in which to hold meetings, club jackets and membership cards, a safety committee to inspect members' cars, and making the club known by its good actions, not its bad ones."

To show that Mr. Kruse knows what he is talking about, take a look at the background of the Cavaliers.

The club was organized in September, 1948 with 15 charter members. At present there are 33 active members and 13 inactive, most of the latter serving in the armed forces. The usual growing pains were suffered during the initial months of operation; public reluctance to accept the club, a skeptical police department, and the loss of disinterested members. As we will see, all the difficulties have been overcome.

It was no mean task, as you will discover when you start such an endeavor in your own area. The basic common interest, cars, was difficult to define. Borrowing a page from the constitution of

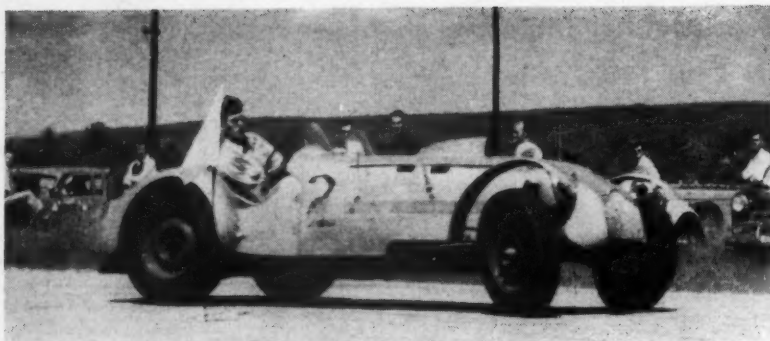


SUMMER SUNDAYS often call for a full schedule of water sports. Several Cavalier members are ardent water skiers, have their own boats

the Associated Car Clubs, the new parent organization comprised of several such clubs, it is well stated as: "... To promote the general safety on public highways through safe equipment and obeying of traffic laws, provide for better understanding, promote fellowship, and provide for mutual benefit and recreation..." The constitution further states: "... It is resolved by the association to do all which is reasonable, as decided by the representative council, within its power to promote and further... safety upon the highways."

In addition to this statement of pur-

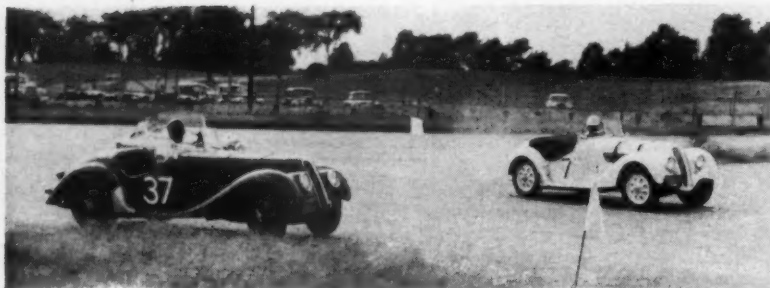
(Continued on page thirty-five)



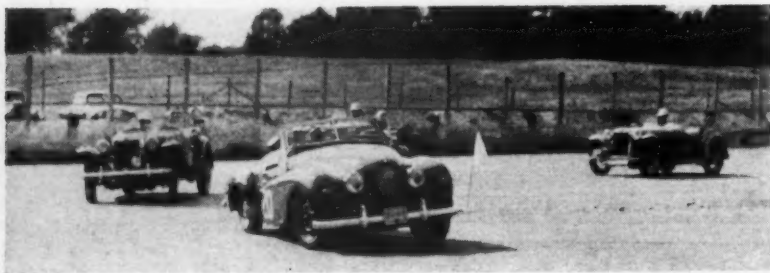
STAR PERFORMER Bob Wilder, J2 Ford-Allard, shared honors with Sherwood Johnston's XK 120, each scoring 1200 points in two-day meet



HENRY SZAMOTA, Mark II MG, leads Dick Thierry's Simca and Hal Stetson's Crosley out of S-bend in Class Four Inside-Outside race



ED TOBIN, No. 37, in 328 BMW, recovers from hectic double spin, letting Bill Kemp's fast, identical BMW through in under-3000 cc event



NEAT CORNERING by George Weaver in Dexter Coffin's Jupiter gave Le Mans veteran clear win over MGs in Inside-Outside five-lap race

TWO-DAY THOMPSON TURNOUT

**EVERYBODY GETS
INTO THE ACT**

by John Bentley

PHOTOS BY BILL HARKINS

THE HALF-MILE asphalt banked track at Thompson, Conn., was the venue for a sparkling two-day national meet held by the SCCA, July 21 and 22. There were 51 competing cars and 65 drivers (14 of them women), while the enclosures held at least another 150 sports cars of enthusiastic non-competing members and their guests. Quite a contrast with the first SCCA Thompson meet, held 1947, which attracted eight entries!

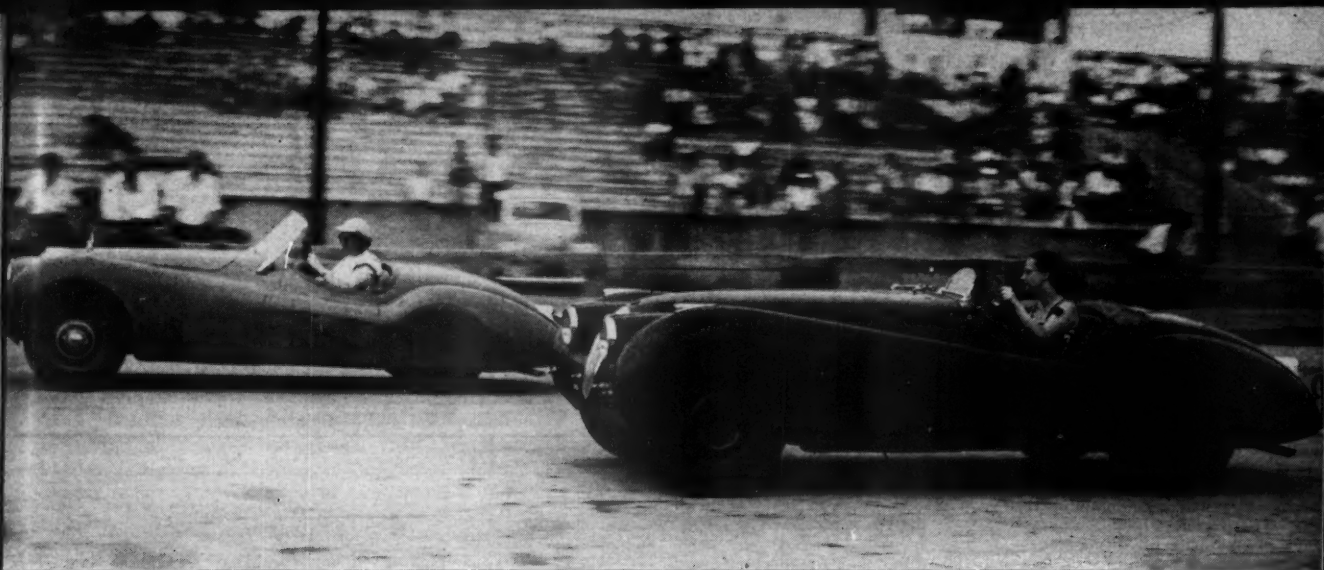
Saturday's qualifying events featured standing quarter and half-mile scratch races of two laps; a "Between the Flags" braking and reversing test, several five-lap races using both inner and outer tracks and offering some tricky corners that snared eager drivers into hectic spins.

FTD went to George Weaver, whose fierce black and red three-litre blown Maserati thundered around the flying half-mile in 28.8 secs. Bob Wilder followed with 29.9 secs., in the Ford Allard J2 with which he conquered Burke Mountain; and Saxon Marsh made third FTD (30.2 secs.) in the Altemus Special with the leaning wheels.

This scribe's blown Mark II, matched with Roland Keith's boosted and sleeved TC MG of Watkin's Glen fame, just got the flag and clocked fastest Class V (1501-1950 cc) time with 33.4 secs. Keith ran 33.6 and Hobart Cook (s/c TC) 33.9—a very close fight.

Quickest of numerous Class VI (1001-1500 cc) MG's was John Van Driel (33.7) with the stock TC which carried him to class victory in the Sebring (Fla.) Six Hour Race, but Hal Stetson's Crosley returned an astonishing 34.0, easily beating Bill Crocker's J2 MG.

The "Between the Flags" went to Sherwood Johnston's black XK 120 in 19.2 secs.—a slick job of maneuvering through a series of narrow, snake-like openings. Bill Kemp's immaculate, white 328 BMW took 19.7 secs. and Bill Spear diced his beautiful Ferrari through in 19.9 secs. The unique Johnny Fitch, driving the writer's MG, outdid everyone with an amazing

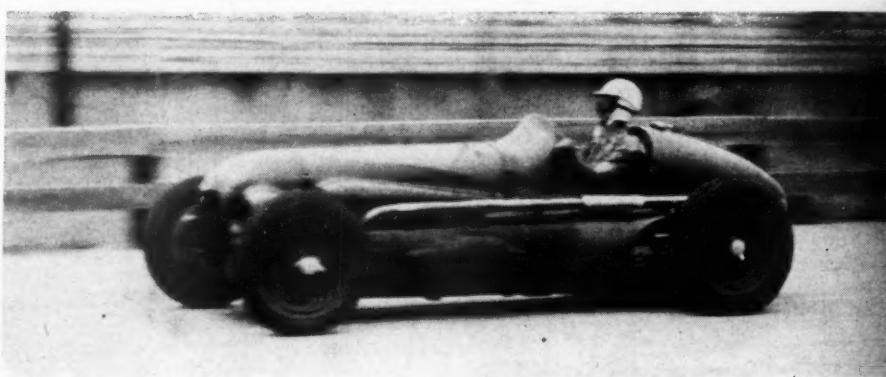


NECK-AND-NECK battle between Annabel Lothrop and Peggy Cade, both in XK 120s. Annabel kept lead, clocking 40.1 secs. for flying half mile against Peggy's close, hard-fought 40.7 secs.

18.2 secs., but this was disallowed as only one driver per event could compete. There were 32 starters and many performed arousing antics by skating around the wrong flags.

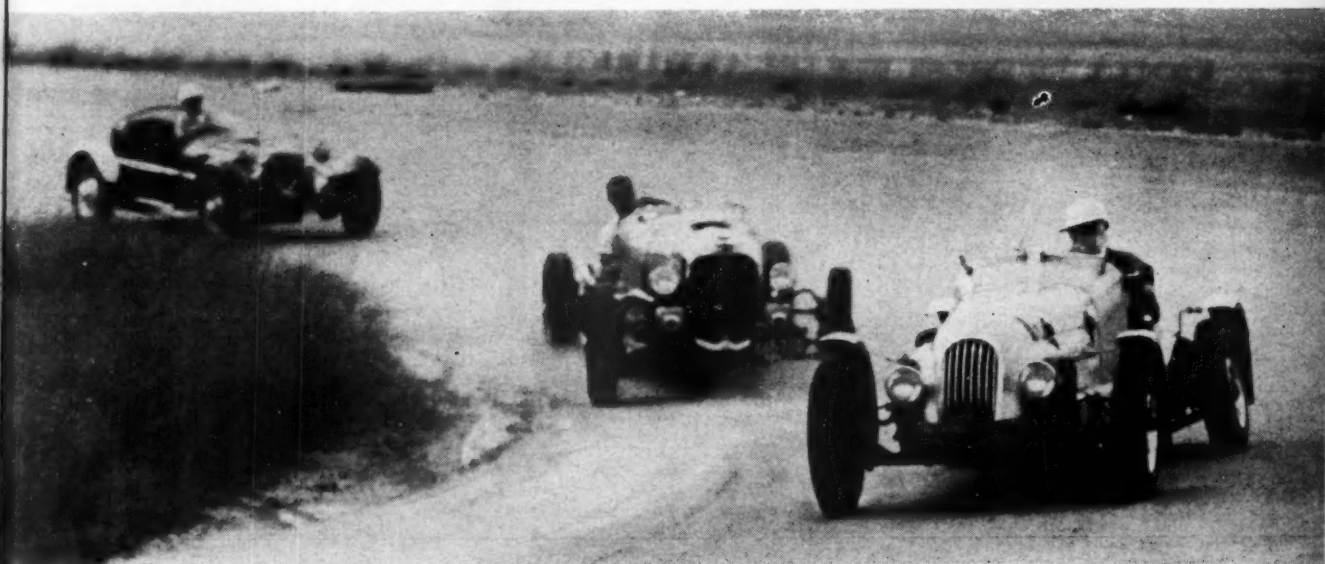
The "Inside-Outside" races provided excitement galore, especially in the Class IV scrap between Spear's Ferrari, the BMWs of Kemp and Tobin, and Keith's MG which somehow got in by mistake. Keith, driving with iron determination, led for two laps before getting the black flag for alleged cutting-in on a turn. He was later reinstated, having committed no offense. Tobin, meantime, spun his "328" through two complete circles and quit, leaving Spear in the lead with Kemp in the second place position.

(Continued on page forty-eight)



GEORGE WEAVER in his three-litre, blown Maserati V-8 scored Fastest Time of Day for half-mile

ALTEMUS AUTO-Banker, Saxon Marsh driving, scooped the Class Two event from Garrett Fuller's Lagonda-Mercury and John Meyer's Cad-Meyer Special. Note angle of Auto-Banker's rear wheels



BANDITS IN COVERALLS

YOU ARE YOUR OWN BEST PROTECTION AGAINST REPAIR RACKETEERS

by Eugene Iaderquist

"Yeah, it's shot all right," the mechanic agreed. Dipping his hand into a bucket filled with oil he fished out a cluster gear. The customer leaned over to look, carefully holding his sharply-creased coat sleeves away from the dripping part.

"Right here," the mechanic said, pointing to a missing tooth. "And here," indicating heavy scratches. "And here," displaying the heavy gouges bitten from the smallest gear.

"But it never gave me any trouble," the customer argued.

"That's the way with transmissions," countered the mechanic. "Can't tell until they're stripped down. This might last you six months—or it might give out tomorrow."

The customer turned his attention back to the gears. For an instant he wondered how the hell they worked, then he shrugged and looked back at the mechanic.

"OK," he said decisively, "put in a new one."

Have you been involved in a similar scene recently? Perhaps it was a clutch or a piston or a main bearing or a handful of valves you were required to inspect. If so, you may have been a victim of one of the oldest petty swindles in automobile history.

The average car owner knows less about the workings of his car than he knows about the internals of the atom. Mechanics, service managers, garage owners realize this. When, if ever, they decide to make their business more profitable and less honest, they work customer ignorance for every penny. That transmission in the bucket of oil may have been torn from a Benny-type Maxwell and the customer probably owned a Dodge. Occasionally a prime stock of worn-out parts is carefully built up over the years. Erskine clutches,

Chalmers valves, Franklin pistons are saved to exhibit to curious Ford, Chevrolet and Plymouth owners.

In recent years, more sophisticated operators have invented newer and better gimmicks to separate the customer from his paycheck. The old substitution gag is considered as out-of-date as the shell game. Since World War II ended there has been a stepping-up of repair rackets to keep pace with the greater number of old cars on the road. Honest operators are almost forced to play the con game to compete with their high-pressure competition. The customer today must be extremely careful in his choice of a mechanic and watchful as an owl while his car is garaged for repairs.

Paradoxically, the more repairs you actually need the more careless you can afford to be in selecting a garage. It is difficult to ruin a wreck and only the most



"Take a look, pal—your old crankshaft is shot!"

QUAN	PART NO	NAME OF PART	SALES AMOUNT
1		GASKETS & OIL	8.60
1		OIL PUMP	14.75
1		BEARING OIL	1.25
1		NUTS & BOLTS Misc	1.75
1		FLYWHEEL EXCH.	10.80
1		CLUTCH ASSEMBLY	17.95
1		RELEASE BEARING	4.55
1		PISTON RINGING	2.35
1		OIL FILTER	2.49
1		DISTRIBUTOR EXCHANGE	7.95
1		CONDENSER	9.00
1		WHEEL CHARGE	2.00
2		LOWER HOSE	2.80
1		PULLEY	5.80
2		CYLINDER HEAD EXCH	10.00
1		FUEL PUMP	8.75
Outside Repairs			
		STEAM CLEAN PARTS	6.00
		CLEAN & REPAIR Mtd.	18.50
BLOCK CANNOT BE CRACKED HAVE SLEEVES AND MUST CLEAN TO .040 OVERSIZE SHARP TO .020 UNDER SIZE			
TOTAL PARTS			
GALS. GAS			
QTS. OIL			
LBS. GREASE			
TOTAL GAS - OIL - GREASE			
TOTAL ACCESSORIES			
TOTAL LABOR			
TOTAL PARTS			
GAS, OIL, GREASE			
ACCESSORIES			
TIRE TUBES			
OUTSIDE WORK			
PAID 12/14/50			
TOTAL AMT. 311.70			

NAME _____ DATE 12/14/50

ADDRESS _____ PHONE NO. _____

SPEEDOMETER READING _____ SERIAL NO. _____

MAKE AND MODEL _____ LICENSE NO. AND STATE _____ MOTOR NO. _____

REPAIR ORDER—LABOR INSTRUCTIONS

EXCHANGE MOTOR (INSTALLED) 99.25

TUNE ENGINE 7.50

CLEAN & REPAIR CARBURETOR 7.50

CLEAN & REPAIR STARTER 6.50

REMOVE & REPLACE RADIATOR 4.50

RECHARGE BATTERY 1.00

ALIGN FRONT END SYSTEM and ADJUST STEERING GEAR 12.50

ACCESSORIES

DATE 12/14/50

WORK AUTHORIZED BY _____ DATE PROMISED _____

DELIVERED TO _____ DATE DELIVERED _____

HOW THE REPAIR racket frequently works is clearly shown in this "doctored" work order. When the customer signed on the line, "Exchange Motor 99.25" was the only item listed

ingenious scoundrel can avoid replacing a worthless part. Besides, if the job is big enough there is plenty of profit in honest repair.

The ideal victim is the owner of a post-war car just beginning to show signs of wear. Probably the engine is using two or three quarts of oil per thousand miles, gas mileage has fallen off about 25 per cent, the tappets are noisy, power and speed are noticeably less than they once were. The odometer probably reads 40 or 50 thousand miles. All the symptoms spell ring and valve job to the average motorist. If the job isn't done soon, the loose engine can rattle itself into junk in 20 or 30 thousand more miles. Repaired, the same mill will go another 40 or 50 thousand miles before extensive rebuilding is required.

The owner of that postwar car makes an ideal sucker because he has money and he has something to lose—his car. He can afford to pay any moderately-padded tab the mechanic gives him. If he doesn't pay, the mechanic can hold the car as security. Minor advantages are the fact that the car will be easy to work on; it will present no unusual problems; parts are readily available from several sources; any reasonably experienced mechanic or helper can do the job in a minimum of time. And when he does get stuck, he will be the type to pay up and nurse his grief in private. In short he is a gilt-edged, 100 per cent American patsy—the con man's cherished friend.

Second favorite is the owner of a late prewar car. More skilled judgement is required of the operator here. He must

decide whether the owner is of the low-income strata and therefore a poor risk or a pinch-penny type who can be pressured into paying. The car will be poor security in case of default. However, even a poor risk will manage to pay the bill if he needs the car badly enough, and some of the mechanic's questions are designed to gauge the intensity of the need.

It is from this second group that most of the available case histories are reported. There was the man who wanted his engine and clutch overhauled because his family was leaving on a trip east. A week after the job was done, he returned to say that the clutch did not feel right. The mechanic assured him that the clutch was fine. It was chattering because it was new. So wife and small daughter bravely set out one day at dawn. It was hardly noon when the husband received a call. Clutch completely shot. He called the garage and they told him to return the car for service. Since this was hardly feasible, he told his wife to have the work done in the small town where she had stopped. Thus he got one clutch job for the price of two.

Then there was the owner of the '42 Buick who answered an ad promising an eight-cylinder overhaul for \$60.50. This was about his limit, he figured, because he still owed the finance company \$275. When he took delivery two days later (almost a record for speed in these grease drops) the Buick performed beautifully. It should. Besides the overhaul, it had a new clutch, transmission, battery, shocks, brakes, U-joints, muffler. It also carried a spanking new mechanic's lien against a bill for \$350.

When the worried owner protested, the mechanic assured him he could get the total amount financed. He could, too. And the finance company only wanted \$105 to carry the contract. At this the sucker let out a howl that rattled the windows of the Better Business Bureau. This scream, the finance company decided, was worth \$70 because they cut the finance charge that much.

Another case began when a bargain hunter drove into a shop that offered a complete overhaul for \$79.50 less \$10 if a copy of the advertisement were brought in. The manager confirmed the offer and work began on the car.

The final price was \$162.45 which the customer paid without complaint. This included new rings, grinding the valves, and a new clutch as well as a number of other items. As the customer prepared to drive home he was warned not to let the engine die because it was too tight to start without a push.

For the next three weeks the engine remained tight. The car never would start without being pushed. But this same tight engine had one other peculiarity. In 1100 miles it drank its way through 12 quarts of oil. The owner returned it for further work under the 90-day/4,000-mile guarantee.

As if there hadn't been enough trouble already, the victim began to suffer in earnest now. Excuses poured in. There were no mechanics to work on the car; so much work was coming in that his job had to wait a little while longer; the piston rings were faulty so the car wouldn't be repaired until the representative of the company manufacturing the rings came around. Finally the job was done and the owner drove it home.

All was fine except that the car still wouldn't start and oil consumption remained high. Then, 94 days after the owner first took his car out of the garage, the clutch quietly died at a boulevard stop. The garage refused to make good because the guarantee had expired four days before.

Shortly thereafter, the victim had the engine torn down by another mechanic. There was water in the manifold, for one thing, and several other discrepancies were found. The work was done by this second mechanic and the bill presented to the manager of the first garage. He seemed greatly disturbed and took a ten-dollar bill out of his pocket.

"Got change?" he asked.

The owner pulled out more evidence to show that \$73 had been spent doing the original work again. All the manager was willing to pay was \$5 for the gasket that had failed and permitted water to enter the manifold. And there the case ended.

A lady with a sense of humor enlivened these case histories with her method of

(Continued on page forty-four)



PHOTOS BY E. RICKMAN

CONSERVATIVE CUSTOM

CHUCK SCHROEDER'S STUDEBAKER



REWORKED MERCURY grille gives an extremely neat frontal appearance. Small twin spotlights make the car seem larger than it actually is

below the headlights were also removed. After all the holes had been filled, Chuck went to work on the grille.

The stock Studebaker grille was removed and a hand-formed shroud was made to support a narrowed-down 1949 Mercury assembly. By sectioning the Mercury grille in the center, a completely symmetrical bar spacing was achieved.

A Packard license-plate light was fitted

to the rear bumper and narrow Chrysler-type chrome moulding inserted between the rear fenders and the body.

The interior of the car is finished in red and white plastic by Victory Upholstery, Van Nuys. The exterior is a very unusual shade of blue-green which was blended for Chuck by Mike Perez of Burbank. Most of the body work was done by Carl Scheurn, Sun Valley, Calif.

LONG, LOW rear deck of the Studebaker has a very European look. Chrome beading between rear fender and body is from Chrysler

CHUCK SCHROEDER'S 1947 Studebaker Champion is an exceptional example of good-looking, conservative customizing. The basic Studebaker lines are retained yet the average person takes a second look trying to decide just what kind of a car it is. All changes have been made with one idea in mind, doing justice to the extremely functional lines of this particular model before the addition of chrome trim. In its present form, it thoroughly fulfills Chuck's conception of how the car should have looked when purchased new in 1947.

The normal customizing formula has been followed in most cases. The chrome hood nose and rear deck pieces have been shaved. The large chrome rear fender stone shields and the plated beadings





LONG FADEWAY line blends well with long, narrow rear fenders. Little lead filler was used

FULL TREATMENT FORD

HANK GRIFFITH'S COUPE

WHEN Hank Griffith, Van Nuys, California, wanted something different in the way of transportation, he approached the Ayala brothers. Gil and Al put their heads together and came up with this design for a 1942 Ford coupe. Hank furnished the car and the Ayalas went to work.

It took six weeks of concentrated effort to finish the car. As the coupe was given the full customizing treatment, a major rework of all body parts was required. As an example, it took \$550 worth of materials and man-hours just to fit the Cadillac rear fenders. The top was chopped 4½ ins. and the frame was lowered five ins. at a proportionate cost. The total cost of the car? \$3600!

This is a typical example of the Ayala craftsmanship and design and Griffith definitely has the something different that he was seeking.

PHOTOS BY ZELENKA



FIVE IN. drop in frame is done with Z-irons at the rear. Road clearance is six ins. at doors



Le Sabre CUTS

PHOTOS BY ANGE BAUME

WHEN GENERAL Motors first announced Le Sabre late last year, a good portion of the public looked upon it with skepticism. They admired the publicity and press releases, said that it was a pretty car, but what good was it? After all, it was only a wood and plaster model, it wouldn't run, the chrome was really silver paint, the wheels couldn't turn, the automatic gadgets were impractical, and the car would never be put on the market anyway.

The skeptics can stop playing their guessing games. Le Sabre is a rolling realization of the most advanced automotive design in the world today, not considering out-and-out competition cars.

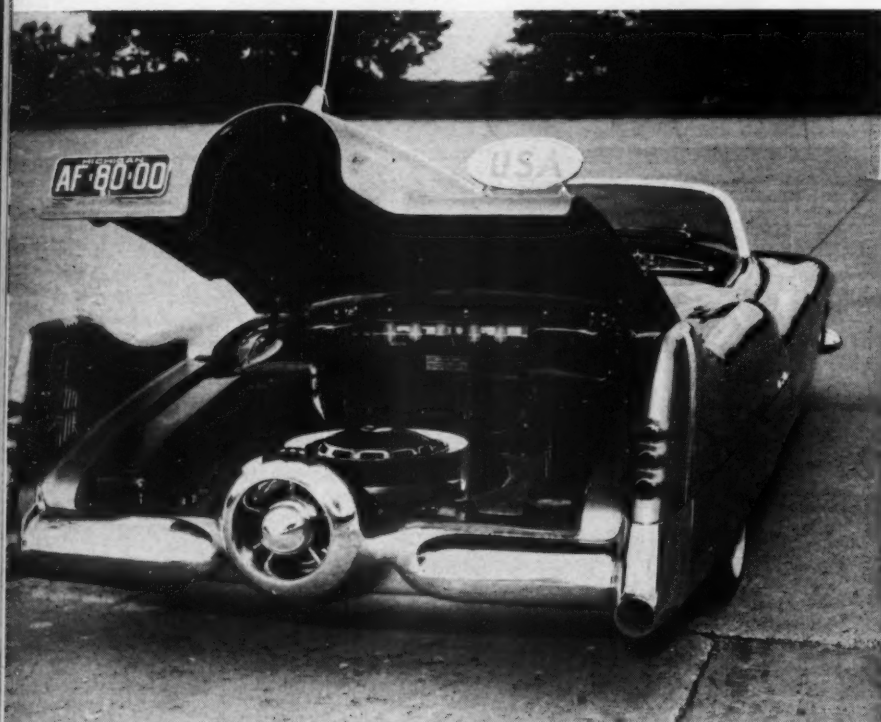
MOTOR TREND's Detroit Editor, Harry

Cushing, had the good fortune of riding in the car at a recent press showing. Harry describes his reactions as follows: "Riding qualities are very good for this type of car. It is a medium ride, not as soft as the standard American car, nor as hard as a true sports car. Nose deflection when stopping is very slight, a sharp contrast to current GM production types. Cornering qualities are outstanding. We whipped it around on the skid pad and it clung to the road as if it belonged to it. At 90 mph it cornered comfortably. It did not throw me from side to side in a weaving test performed for the benefit of the photographers."

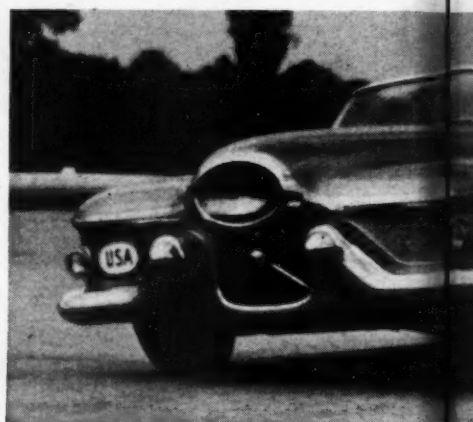
There are no performance figures available at the moment; GM has only begun

the Le Sabre tests. A speed run has been made on the limited straightaways of the proving ground, the car reaching an indicated 135 mph. The actual speed was somewhat less than that as the speedometer calibration showed a plus error of eight mph at 100. GM clearly states that the car is for experimental development

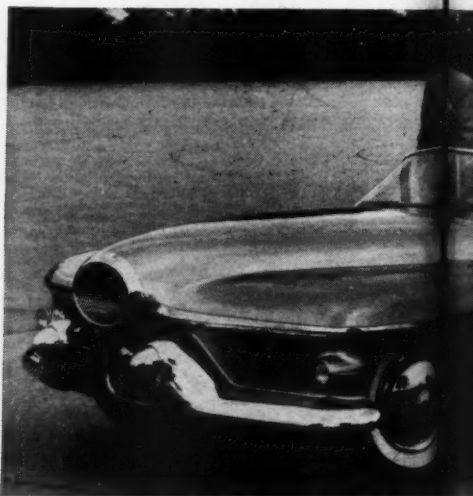
only nature
of them
are ved
is to con
proving
gine de
lbs. weig
men Am



REAR DECK lid, inner door panels, lock pillars, front fender valances, and cowl are cast magnesium. All other body parts are aluminum sheet. Large 12-volt battery operates 15 electric motors. Tail fins contain 20-gallon rubber tanks for gasoline and methanol, direction, back-up, and tail lights. Stop light is in spinner. Bumper tips serve for dual exhaust system outlets



DURING HIGH-speed cornering demonstration, Le Sabre's weight. Front suspension is rubber torque, axles. Modified Dynaflo-type torque carrier, chrome-moly box frame. Wheelbase is 113 inches



MOTOR TREND's Detroit Editor, Harry Cushing, riding in the car. Cushing describes the car's cowl height. Rear-fender air scoops for front brakes. Oval grille above air scoop, in which the shoes are mounted side by side

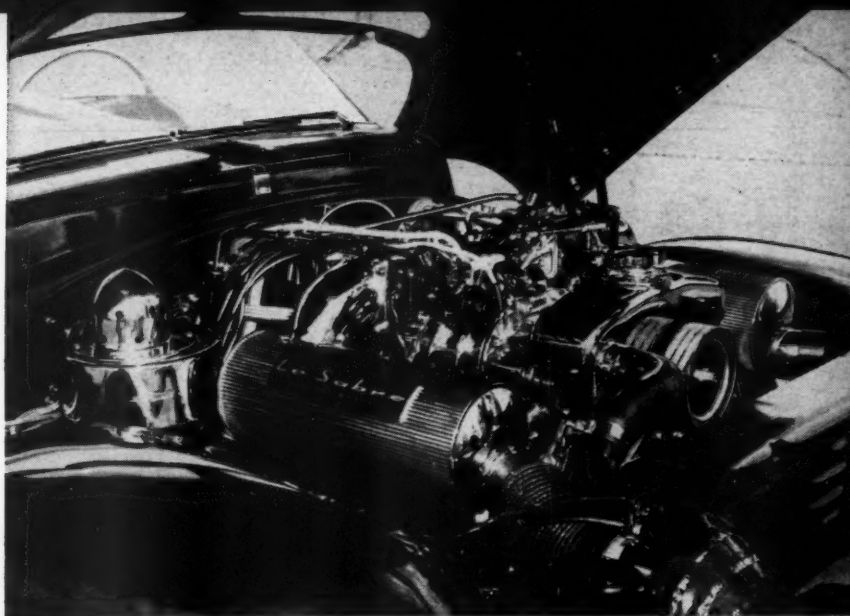
onatures may appear on one or more of the company's products as the new ideas are developed. Nevertheless, GM is to be congratulated for its initiative in producing Le Sabre and designing an engine that develops one bhp for every 1.65 lbs. weight. Something of an advance over American production car practice!



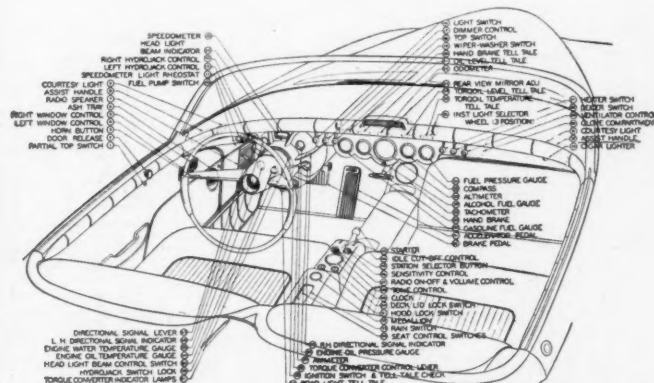
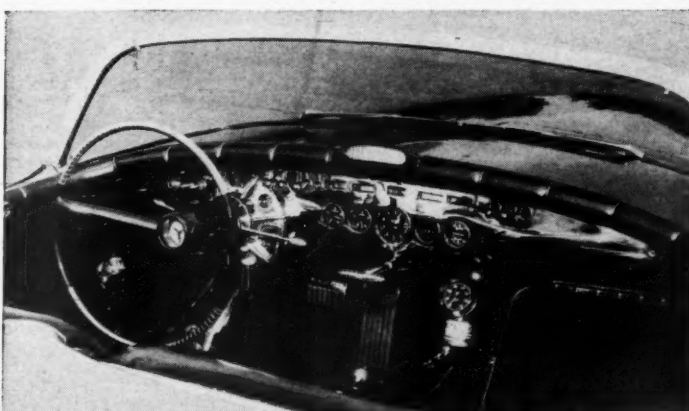
demonstrate the Sabre rolls very slightly in spite of 3000-lb. ber torsion, rear has tapered leaf springs with de Dion torque arm and rear end are mounted as one unit on axle is 115 overall length 200 ins. Power:wt. ratio about 1:10



Harling, stands beside Le Sabre, emphasizing its 36¼-in. scoops functional, ventilate battery compartment, cool rear scoop, bringing headlights to front. Twin shoe brakes, side by side and 13 x 8.00 tires are among 80 experimental features



ON GM DYNO, the 215 cu. in. V-8 engine developed 335 bhp at 5500 rpm. Roots-type supercharger puts out 29.5 psi at peak. Compression ratio is 10:1. Two aircraft-type pressure carburetors feed directly to blower. Bore is 3¼ ins., stroke 3¼ ins. Block and heads are cast aluminum giving the amazingly low total engine weight of 550 lbs.



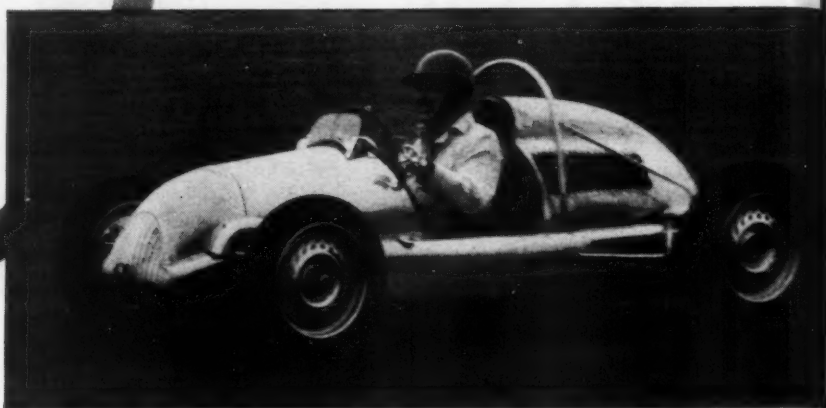
INSTRUMENT PANEL really is functional, contains scores of devices, explained in diagram, essential to use of experimental equipment



0 TO 100 MPH IN 14¾ SECONDS

***FIRST* 500 CC SPORTS TRIAL**

by John Bentley



PHOTOS BY DICK THIERRY AND CHUCK KOTCHAN

THE EXPRESSION "goes like a bomb!" having been used with confetti-like generosity in describing various automobiles only moderately able to get out of their own way, I held mental reservations even as the beautiful little Effyh was unloaded from its trailer at Linden Airport, New Jersey. The taut, eager lines of this machine promised much and there was no doubt that it would be good; but the question was *how* good?

Charles J. P. (Chuck) Kotchan, sole US Effyh distributor, informed me with a sly grin: "Driving the Effyh will give you as big a thrill as you ever got the first time you kissed a girl!" And there was the backlog, too, of this particular baby. A sizzling 1:12.8 at the Giant's Despair Hillclimb, followed by a class win at Bridgehampton, both times with the inimitable John Fitch at the wheel. That's saying nothing of a brilliant string of European Formula III successes in which an Effyh driven by the Swedish ace Ake Jonsson scooped 54 firsts, four seconds and two thirds in 60 starts, beating Grand Prix 4CLT blown Maseratis in Denmark and Sweden and taking several Swedish hillclimb records held by Alfas and Bugattis. But I still had to be shown, and I also had to learn, this being my first attempt at handling a 500 cc projectile.

The purpose of this particular Sports Trial was to make various acceleration and braking tests, get some idea of the Effyh's speed and roadability, and above all to acquire first-hand experience of what it feels like to drive an outstanding Formula III monoposto race car. By kind permission of Bob Meyer, airport manager, we were able to use the main .9-mile as-

phalt runway, but weather conditions were bad from the start. A heavy overcast heralded a drizzle that put in a spasmodic appearance, cutting short the stopwatch tests.

Only one adjective adequately describes the Effyh's brakes: they are fantastic, creating an effect unlike those of any other car. The 12-in. aluminum drums with shrunk-in cast iron liners each have twin hydraulic cylinders and would be ample for stopping a car weighing four times as much. With this 529-pound package of Swedish dynamite, a mere stab of the brake pedal produces a weird reaction, staggeringly quick and dead true even at speeds of 80 and 90 mph. The machine slows as though it had slammed into a ten-foot wall of sponge rubber—while the driver just keeps on going! I made the error of not fastening my safety belt, and but for the steering wheel I would have been catapulted over the front of the car and hurled several feet into space.

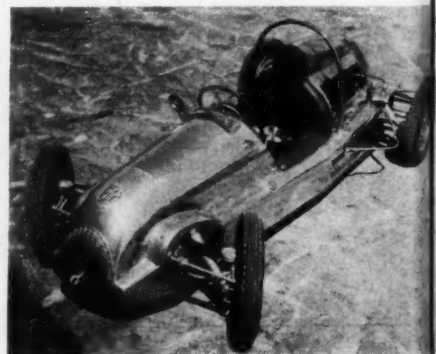
The wet surface, combined with patches of washboard, made serious braking tests impracticable, but under normal conditions, traveling at 120 mph, it is claimed that the Effyh requires under 300 ft. to slow it down sufficiently for safe hairpin cornering. In any event, conventional brake tests from moderate speeds would mean little or nothing on a car of this type. The advantage conferred in races by its enormously powerful stopping mechanism, however, needs no emphasis.

Reviewing things in their proper order, we (photographer Dick Thierry and my-

BODY SHELL is of hand-formed aluminum panels, highly polished, and frame is of chrome-moly tubing. Front A-arms are springs

self) first walked around the machine a dozen times, taking appropriate shots and studying its anatomy. Conceived and built in 1946 by the Hakansson brothers, the Effyh bears evidence of meticulous forethought in design and really first class workmanship from end to end. The frame is constructed of welded chrome-moly tubing and the suspension, independent all-round, features wishbones in combination with tubular shock absorbers. An interesting point is that these wishbones are built not of rigid members but of quarter-elliptic type springs, suitably anchored for up and down movement. The result is a surprisingly soft suspension in so light a car, yet freedom from bounce and dangerous mushiness. At all times, too, one is conscious of the enormous rigidity of the frame.

The single-cylinder British JAP (J. A. Prestwich) engine is mounted well forward of the rear wheels and uses an ingenious Amal twin-flot carburetor to compensate



for gravitational pull on sharp turns. Ignition is by BTH magneto with a Lodge R49 plug for sprints, (R51 for long-distance racing and Champion J15 for warming-up), and fuel is supplied through a mechanical pump from a 1½-gal. tank directly above the cylinder and two additional saddle tanks (15 gals.) built into the body either side of the seat. Just what his fuel is, Kotchan wouldn't reveal, but the base is methanol, formula-blended with three other ingredients.

"Throw-away" type lubrication is used (Castrol R) in conjunction with a gravity tank and dual-cam oil pump feeding both the valve gear and main bearings. Feed rate for the former is one drop per three seconds and for the latter one drop per second. Another ingenious feature is the chain oiler. The tubular body hoop immediately behind the seat is partly filled with oil which is metered through a petcock and flows down a curved pipe, drip-feeding the chain by gravitation.

The four-speed (British BAP) motorcycle gearbox, combining a multiple-dry-disc clutch, is controlled by a shift lever on the left of the cockpit and is ridiculously easy to operate. This lever falls nicely under the hand, so that you merely have to flick it once forward for each up-shift and once backward for each down-shift. The use of the accelerator when shifting down is unnecessary, and a visual indicator mounted on the aero screen shows by means of a pointer and a simple scale exactly what gear you are in.

At left, on the outside of the body, is the magneto switch and on the inside the handbrake lever. There is nothing on the dashboard but a rev-counter calibrated to 6000 rpm, and a knurled knob which enables the steering column to be moved up and down for variations in steering wheel rake and for getting in or out of the car. Light but positive rack and pinion steering is used, giving 2½ turns from lock to lock.

Okay, now let's get in and drive. The engine has been steadily warming up after a push-start and the "boom—boom—

boom!" of the exhaust has the staccato bark of a heavy caliber machine gun. Every line of the hand-formed and highly polished aluminum body with its graceful compound curves exudes the spirit of power and speed. You slide into the comfortably upholstered red leather seat, adjust the steering wheel and park your elbows firmly on the padded rests, either side. Gingerly, you depress the gas pedal and the instant response takes you by surprise. The bark of the engine becomes a sharp, savage snarl and the tachometer needle flicks around to 5500 rpm. "Careful, there!" shouts Kotchan. "Don't run her past 6000! It's deceptive!"

It certainly is. You flip into first, point her up the runway and kick down the treadle. What, exactly, happens next is hard to describe. You get a peculiar sensation in the small of your back, accompanied by a feeling that someone has just given you a tremendous shove forward—only it's the seat. Before you can catch your breath, you've hit 6000 rpm. Whammed into second and again the whip-like crackle rises to a crescendo as the tach zooms up. Repeat for third, then fourth, and now you're really rolling! The wind is like the backwash of a plane's propeller and the ground seems startlingly close; but the car holds its course true as an arrow, and though the front suspension units seem to be dancing a jig, none of this is felt at the steering wheel.

After a couple of runs to accustom myself to the car, we just had time to make some stopwatch tests before the raindrops began to hit me in the face with the stinging force of particles chipped from concrete! And to make things even easier, my goggles were neatly stuffed away in a case, which in turn reposed in an inaccessible pocket. The Effyh's cockpit, by the way, is quite adequate for a driver of average build and height (about 170 pounds and 5 ft. 11 in.) but becomes a shoehorn fit for a heavyweight.

It was my original intention to make 100 mph the high end of the range, but at 5000 rpm in high, with the car rapidly running out of runway and one eye closed by the searing force of a bullet-like rain-

drop, I gave the signal at what turned out to be 93 mph.

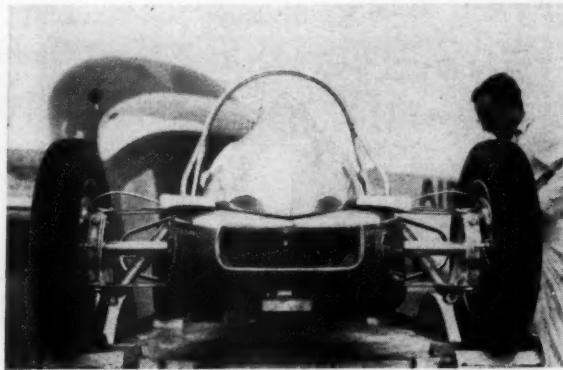
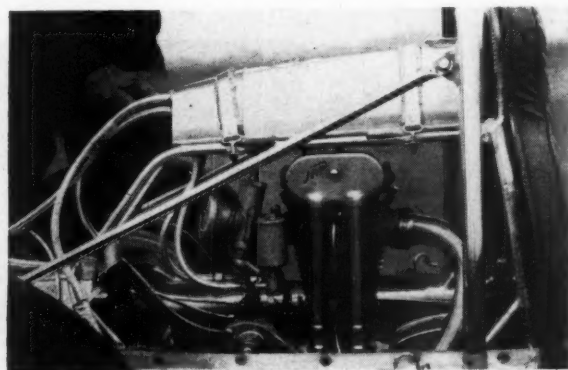
The beauty of the Effyh's motorcycle shift is that you can flip from one gear to the next, up or down, without using the clutch. This method undoubtedly helped clip fractions of a second off each of the acceleration times. Though the results were quite stimulating, there is no doubt they could be bettered under favorable conditions, and bettered by an appreciable margin using a lower gear ratio. The Effyh still had the 21-tooth cog and 5.00 x 15 tires fitted for Bridgehampton, which is a useful compromise between acceleration and speed; whereas a 19-tooth sprocket, (second of the four different ratios—17, 19, 21 and 23—supplied with each car), results in still more "dig," as shown on the factory graph. For example, standing start to 100 mph in 14½ secs. has been achieved easily as the mean of several runs.

Impressions of the Effyh can be summed up as follows: technically, it presents without question a highly ingenious composite of the most advanced ideas on balance, weight distribution, inherent roadability in its widest sense, and power-weight ratio possibilities. From a practical standpoint, the Effyh demonstrates with enormous vigor the fallacy of the idea that performance can stem only from high power and a vast number of cubic inches. But it does a lot more: the very real thrill you get from driving this type of machine opens up new concepts in sports and competitive driving and points to something beyond the exciting Formula III races already well established in Europe. The time is not far off when lightweight sports cars of flashing performance, yet with modest price tags and very low upkeep costs will emerge as the direct offspring of the 500 cc racing machine.

Parallel with Cooper experiments in England, the Effyh's designers are at work on a two-seater sports car that will revolutionize ideas on performance in the small engine field. Details of this interesting machine are not yet available for publica-

(Continued on page forty-eight)

REAR VIEW of trailer-mounted featherweight shows suspension layout, air exhaust duct from engine. Roll bar is also reservoir for chain oiler



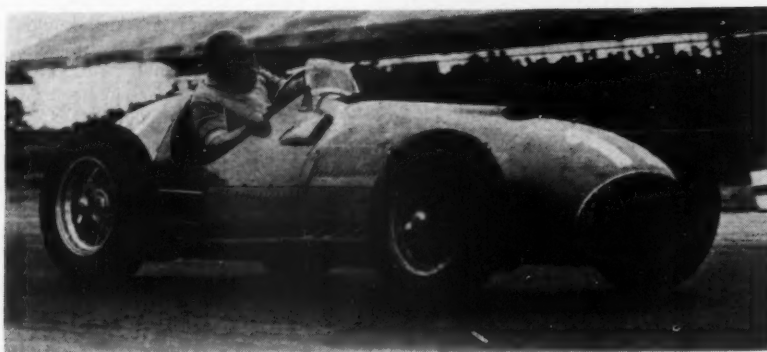
SPORTING SCENE

All-Conquering Alfa Romeo Finally Defeated at Great British Grand Prix

by John Bentley

PHOTOS BY THE AUTOCAR, LONDON

HISTORIC HIGHLIGHTS marked the exciting Silverstone Grand Prix run off on the famous 2.9-mile airport circuit, Saturday, July 14. Weather conditions were good and a record crowd began invading the airfield at dawn, to witness a pitched battle between the two greatest Formula I cars in the world today—Ferrari and Alfa Romeo. These contenders, representing opposite schools of thought, gave fresh impetus to the highly debatable question—blown or unblown?



FROILAN GONZALES of Argentina hurls his unblown Ferrari through Stowe Corner, on the way to capturing laurels that have been Alfa's

Froilan Gonzales added fuel to the argument on this occasion, driving a 4.1-litre Ferrari (earlier, single-ignition type) which carried him to his first Grand Prix victory at 96.11 mph. Compatriot Juan Manuel Fangio at the wheel of a Type 159B blown Alfa lost out by nine secs. after a terrific struggle in which

he grabbed the lead on the 12th lap, only to lose it again after repeating the struggle a few laps later.

The BRMs were again disappointing, though ably handled by Peter Walker and Reg. Parnell. Both cars arrived so late their drivers had no time for practice, and the best they could do was finish fifth and seventh with Parnell in front. Time is running against the BRM, and though



FANGIO, ALSO from Argentina, brought his 159B Alfa home in second place, just nine secs. behind Gonzales' winning, unblown Ferrari

Thirty

QUICK SILVERSTONE



the bugs are likely to be taken out, the prospects of this design along about 1954 are rather gloomy.

Practice on Thursday showed Gonzales to be in great form when he beat Fangio's fastest time and clocked 1:43.4 at an average of 100.57 mph, being the first driver ever to lap Silverstone at better than 100 mph.

In the race, Gonzales jumped into the lead at once, soon followed by Fangio and then Ascari (Ferrari). A savage scrap for third spot quickly developed between Ascari and Farina (blown Alfa) who challenged strongly and eventually got by. Farina, however, was forced to quit on the 54th lap with flames streaking from the engine, letting Ascari back into third, who in turn gave up two laps later with gearbox failure. Meantime, further back, Villorresi's Ferrari was moving up with frantic haste, the driver shaking his fist in his eagerness to pass Bonetto's Alfa. Over-keen, Villorresi spun out at Copse Corner and Bonetto breathed more freely as he held third for a brief span after Ascari's retirement. But then came the



PETER WALKER pilots the BRM down Hangar Straight. Two of these cars started, both finished near the top: their first successful appearance

Motor Trend

inevitable pit stop, for Bonetto which, though quick, let Villoresi through anyway. Sanesi's Alfa meantime suffered the same trouble that cost Fangio the Belgian Grand Prix. His pit crew struggled for three minutes to remove a wheel!

Fangio took Gonzales early in the race and the two Argentinians quickly drew clear of the field, but the Ferrari seemed to handle better than the Alfa and Fangio's unsuccessful effort to pull away resulted in a series of vicious tail slides. Gonzales, pushing hard, nearly came to grief himself at Becketts Corner. The Ferrari slid, hit a tub and took off, miraculously landing between tubs and straw bales on the outside of the corner. Gonzales lost only 60 yards to Fangio and kept right on, soon going into the lead which he never again lost. Fangio, too, seemed unhappy with his Alfa's suspension and suffered from violent rear wheel patter.

Gonzales took in two drums of fuel at 60 laps, while Parnell's fast refuelling of the BRM did nothing to ease painful leg burns sustained from the terrific heat in the cockpit. But being fifth, he stuck it out gamely. The BRMs ran well and were fast but appeared harder to manage on turns than the Ferraris and Alfas.

Towards the end, Signor Guidotti, Alfa's team manager, all but lost his famous "toothpaste ad" smile when he realized that Fangio's gallant attempts to regain the lead made no impression on Gonzales. Handling his ERA faultlessly, Bryan Shawe-Taylor finished eighth, while Johnny Claes, though last, made the best Talbot showing with a lap in 1:54.0.

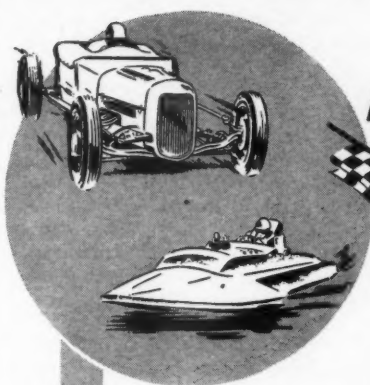
This was probably the best Silverstone race ever staged and the well-matched opposition holds great promise for future Grand Prix racing.

THE FINISHERS

Car	Driver	
1. Ferrari	J. F. Gonzales	2h: 42m: 18.2s 96.11 mph
2. Alfa Romeo	J. M. Fangio	2h: 43m: 9.2s 95.61 mph
3. Ferrari	L. Villoresi	(88 laps)
4. Alfa Romeo	F. Bonetto	(87 laps)
5. B.R.M.	R. Parnell	(85 laps)
6. Alfa Romeo	C. Sanesi	(84 laps)
7. B.R.M.	P. Walker	(84 laps)
8. E.R.A.	B. N. Shawe-Taylor	(84 laps)
9. Ferrari	P. Whitehead	(83 laps)
10. Talbot	L. Rosier	(83 laps)
11. E.R.A.	F. R. Gerard	(82 laps)
12. Talbot	J. Duncan Hamilton	(82 laps)
13. Talbot	J. Claes	(80 laps)

CALENDAR OF EVENTS

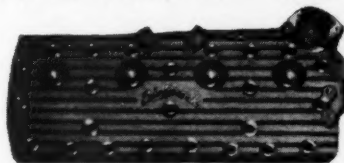
September 15-16 Watkins Glen Road Race, Watkins Glen, N.Y.
 September 15-16 Closed Course Road Race, Aspen, Colorado
 October 7 Catalina Island Road Race, Calif. Sports Car Club, Catalina Island, Calif. (Tentative date)
 October 14 Sandberg Hill Climb (Tentative date), So. Cal. Region SCCA
 October 21 Reno Road Race, No. Calif. Region, SCCA
 October 28-Harwood Trophy Race (Tentative event), Palm Springs, Calif.
 November 11 Ensenada Point-to-Point Race, Ensenada, Mexico, Calif. Sports Car Club
 December 9 Las Vegas 'Round-the-Casinos Race, Las Vegas, Nevada, Calif. Sports Car Club



First With the Best!

CYLINDER HEADS

For
1949 and 1950 Ford and Mercury



We have incorporated all our time proven features into our '49 and '50 Model Heads. Installation is extremely simple. No altering or changing of component parts necessary.

For Ford: Available in 7 1/2, 8, 8 1/2, & 9 to one ratios.

For Mercury: In 7 1/2, 8, 8 1/2, 9, & 9 1/2 to one ratios.

Edelbrock Equipment Co.

4921 West Jefferson, Los Angeles 16, Calif., PARKway 3191

See your dealer or write direct

Your CONVERTIBLE Headquarters

Futuristic Styling—"Tops for Your Car"
 All makes and models, 1941-1951, in black or tan. \$59.50 complete.

A \$125.00 Value, all have zip-down rear curtains



Easily installed, our tops come in the 3 window (as shown), Big Back Window or regular curtain types. Also, for the FIRST TIME the new, miracle plastic convertible tops in a choice of 8 colors, including Big Back Window and unconditional guarantee of one year. Your top comes completely cut, sewn and trimmed, including all beading and snaps needed for a finished custom job, along with simple installation directions. The canvas tops are made of the finest 3 ply "original equipment" material.

SPECIAL OFFER

A durable, attractive 2 ply canvas top, all makes and models, black or tan.

Only **\$29.95** complete

A Rare Buy—Specify year, make and model when ordering.

Dealerships available—(use letterhead)

Write for free catalogue, fully describing our convertible and speed equipment.

Yes, it's a Ford Convertible with the sensational new

ADD-A-TOP AND CONTINENTAL TIRE KIT

- Custom appearance.
- 2 car in 1 utility.
- 10-minute change-over, as the weather dictates.
- Available NOW for 1949, 1950 and 1951 Ford, Chevrolet, Pontiac, Olds 88, DeSoto, Chrysler and Dodge.
- Write for availability dates on other makes.
- Newest "folding" type.
- Made of the finest, heavy gauge steel.
- Comes complete, nothing else to buy.
- AFFORDS a greater trunk space and "different" custom styling.
- Available NOW '49, '50 & '51 Ford and Chev, '51 Merc, Kaiser and Packard.

\$225.00 prepaid,
includes shipping

\$119.95 prepaid,
includes shipping

UNIQUE INTRODUCTORY OFFER — 30 DAYS ONLY!

Your order for an ADD-A-TOP or Continental Kit entitles you to a \$20.00 credit on any Convertible top you choose.

CONVERTIBLE Accessories, Ltd.

4657 Madison St., Chicago 24, Illinois

A Division of

George J. Eberhardt & Co.

Mansfield 6-8220

Supreme Sports Car

(Continued from page eighteen)

racing cars. There were successively tried on this car a set of Norden carburetors, two sets of Winfields and one set of custom converted Ford sixes before the answer was arrived at—the English S.U. normally used on the Jaguar XK120. What is needed is range—from 500 rpm to 7500 rpm and the normal two-jet carburetor cannot handle this range. The S.U., with its infinitely variable jet, can handle it, provided properly contoured needles are used.

The camshaft grind and timing are entirely suitable for engine speeds of over 3500. Under that the effect is the same as if there were a leak in each combustion chamber. At least 23 degrees overlap on the intake and 18 on the exhaust proved workable.

The Offy comes equipped with a Scintilla magneto with manually-operated spark control. Again this is fine if one is always at 5000 rpm, but is eminently unsuitable when one is at 750 one minute and 6500 the next. An automatic Scintilla Vertex magneto was the answer, and it avoided pounding out the bearings at low speeds with advanced spark.

Initially a stock iron flywheel was installed, but when this disintegrated at 7000 rpm a special cast-steel flywheel was made and installed. A 12-volt English Austin generator driven by two belts was also installed, and a Ford ring gear and Ford starter.

The vane-type fuel pump used on the stock racing engine was eminently unsuccessful, despite its cost of \$67. Because it continually clogged and failed it was replaced by a Stewart-Warner electric fuel pump which is inexpensive and more reliable.

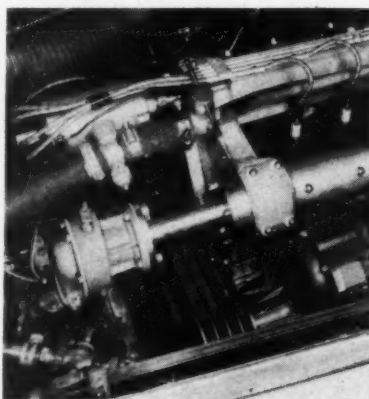
Since Offenhausers do not come equipped with fans, a bus-heater motor and fan were installed just behind the radiators—one for water and one for oil, the latter one having cutoffs in case recirculating is not desired. This fan has to be used only on hot days at low speeds.

The original Cisitalia engine provided 55 bhp, yet drove the car at a clocked speed of 100 mph. Competition models using the same engine achieved speeds of 117 mph, and this particular car in souped-up form achieved about 113 mph.

The 94 bhp Offy engine required extensive changes. The steel flywheel was one. In addition a Ford truck clutch was installed along with a Ford transmission. At first a Lincoln cluster gear was used but, although this proved a genuine speed of over 95 in second (105 on the speedometer), it allowed for little acceleration. This cluster gear was replaced by a Ford cluster which gave about the right ranges of first and second, particularly with the 3.78 rear axle gear.

As many as possible of the non-essential Italian parts were replaced by American ones. A Ford gas tank was installed. All Stewart-Warner instruments were substituted for the Italian ones. Sealed Beam headlamps and American tail lamps were installed.

Supercharging is a science and one dependent on much technical knowledge. Pesco Products Division of the Borg-Warner Corporation required six months to do the job, working in close cooperation with Meyer-Drake and with Roy Sherman, 1949 National Midget Champion who builds and races Offys with extraordinary success. The 10:1 compression ratio was lowered to slightly under 7:1 to allow for the supercharging. New pistons and rods were installed, along with new valve guides. The crankshaft was chrome plated, in accordance with best track practice. A new intake manifold was constructed, and the Rootes supercharger was installed directly against the redesigned manifold.



BLOWER DRIVE is simple and sturdy, consists of four steel belts from front of crankshaft to adjustable idler, from idler to supercharger

This particular engine has been made to deliver 290 bhp using special valves and fuel with a centrifugal-type blower delivering 29 lbs. pressure. It has won championship races in competition with the big Offenhauser engines. But this type of blower is useless in road racing. It gives its big push only at high rpm. The Rootes-type blower, designed and made by Borg-Warner's Pesco Division, however, delivers 15 lbs. but delivers them when the road racer needs it, at low rpm.

A very clever device was installed which allows the carburetors to deliver direct to the intake manifold at low speeds. Attached to the gas pedal is a butterfly valve which closes as the accelerator is pressed. Wide open, the butterfly is completely closed and all the mixture from the two S.U. carburetors is delivered to the supercharger which pumps directly into the intake manifold.

The drive is from the end of the crankshaft. A pulley operates four Goodyear

steel belts which run to an adjustable idler pulley. From the idler another four belts run to the supercharger. The drive is simple, rugged and adjustable and was designed by Goodyear specifically for the car.

The results: a starting bhp of about 65, as against 40 without the supercharger, and a maximum bhp of between 160 and 170. Since the weight originally was about 1700, and is now about 2000 lbs., the bhp/weight ratio is excellent.

The supercharger turns at 1.63 times engine speed at present. It can easily turn faster with a resultant increase in output. It is the opinion of the Pesco Chief Engineer, Mr. Bud Middendorf, who personally supervised the entire job and the testing, that 200 bhp is possible. For those caring to experiment similarly there is the distinct possibility of increasing the displacement from 89 to 115 cu. ins. and installing a centrifugal blower behind the Rootes units. Prior to the installation of the supercharger a speedometer reading of between 135 and 140 was secured, but the speedometer error was probably 10 mph on the high side. What the car will do with the right ratio differential is anyone's guess. Bud Middendorf's guess is 150 mph, as is.

Only one change remains to bring the car to the front of automotive design in the road racing category: independent rear suspension as provided by a de Dion-type rear end. This is being constructed, out of Ford components, to standardize and to make possible quick changes of ratio for different events. Should the differential turn out as hoped there will be nothing of more advanced design in this category in the country.

PREVIOUS MOTOR TRIALS

MG-TC, 1950 Studebaker Champ.....	Oct. '49
1950 Buick Special.....	Dec. '49
1950 Ford V8.....	Jan. '50
1950 Hudson Pacemaker.....	Feb. '50
1950 Plymouth.....	Mar. '50
1950 Mercury.....	May '50
1950 Nash Rambler.....	June '50
1950 Oldsmobile 88.....	July '50
1950 Chrysler New Yorker.....	Aug. '50
1950 Chevrolet.....	Sept. '50
1951 Kaiser.....	Oct. '50
1951 Henry J.....	Nov. '50
1951 Nash Statesman.....	Dec. '50
1951 Ford.....	Jan. '51
1951 Packard 200.....	Feb. '51
1951 Hudson Hornet.....	Mar. '51
1951 Mercury.....	Apr. '51
1951 Chrysler V8.....	May '51
1951 Studebaker V8.....	June '51
1951 Lincoln.....	July '51
1951 Dodge.....	Aug. '51
1951 Pontiac.....	Sept. '51

PREVIOUS SPORTS TRIALS

1951 Crosley Super Sports.....	Mar. '51
1951 Singer.....	Apr. '51
1951 Simca Huit.....	May '51
1951 Sunbeam-Talbot.....	July '51
1951 Ford Consul.....	Aug. '51
1951 Nash-Healey.....	Sept. '51

TRACK TALK

by Burt Chalmers

WHILE SOME of the ex-champions and runners-up are comparatively far behind in the present point score for the 1951 AAA National Championship, the schedule that lays ahead starts with the 100-miler at Springfield, Ill., and winds up with, at this writing at any rate, the 100 miler at Bay Meadows. The slight uncertainty is due to there being an outside chance of a go at Del Mar. This, for sure, creates enough points—2400, without even counting points the fellows might pick up at Pikes Peak—to make the latter part of the season present a highly unpredictable picture of the 1951 championship.

Speaking of the Pikes Peak goal, a lot of interest will be in the Johnson car, with Mack Hellings doing the wheel-twisting. This is one midget that really grew up—it stretched out to a sprint car last year. It's being expanded to championship specifications for the Peak and a blower is being added to help out the 107 in. Meyer-Drake engine.

There's lots of talk going around about driver changes in a few of the really hot cars, and maybe some of them will come about. Luigi Lesovsky is going right ahead finishing up the new Balinger that Lee Wallard was to drive. Bob Ball's box is being reworked to handle as well on the dirt as it does on the pavement. With all these changes and additions, anything can happen.

A sad note is that while Lee Wallard is well on his way to complete recovery skin grafts and other complications will probably keep him out of competition for the rest of the championship season. When Lee won the Big One, he said that he was going to be one of the racingest Indianap winners and we all know that he wasn't just whistling a tune. With all the personal appearances a "500" winner is asked to make, Lee and his quick wit and easily-liked personality could have been one of the best things that has happened for big time automobile racing.

While it won't matter too much for the rest of this year, the new division of NASCAR championship cars with stock American engines will probably draw as much attention as the AAA National Championship in 1952. A big start in that direction is their date for a 500-miler at Darlington, S. C., on July 4th, 1952.

AAA CHAMPIONSHIP RACES

Sept. 2—Duquoin, Ill.—100 mi.
Sept. 3—Duquoin, Ill.—200 mi.
Sept. 8—Syracuse, N. Y.
Sept. 9—Detroit, Mich.
Sept. 23—Denver, Colo.
Oct. 21—San Jose, Calif.
Nov. 4—Phoenix, Ariz.
Nov. 11—Bay Meadows, Calif.

SPLIT SECOND TIMING MEANS

POWER



WHEN SPLIT SECONDS COUNT, THE RIGHT CAM-SHAFT IS DETERMINED BY PERFORMANCE REQUIREMENTS AND DRIVING CONDITIONS. FOR PRECISE WORKMANSHIP . . . FOR PRECISE TIMING . . . SELECT A HARMAN & COLLINS TIME TESTED CAM.

HARMAN & COLLINS

INCORPORATED

5552 Alhambra Avenue, MT-10 Los Angeles 32, Calif. Phone CApitol 4610

FROM ENGLAND! → NEW LIFE FOR ALL TIRED ENGINES

BURN WATER in your CAR
with the **AMAZING OCTA-GANE "50"**

This pressure injector, the result of years of research and development, is the only all-bronze, "fog type," exhaust operated injector on the market today. It is adjustable to burn up to one gallon of water with every 10 gallons of gasoline. Complete with 1½ gallon water tank, and all fittings.

\$24.95 ppd (or send \$2, balance C. O. D.) Give car data.



- ★ Reduces Oil Consumption
- ★ Restores Compression
- ★ Stops Piston Slap

DON'T spend big money overhauling your car! Use Holt's "PISTON SEAL" instead. It's "Penicillin" in your engine! Effectively eliminates these ailments! This amazing British product compensates for wear by forming self-expanding pliable lubricating seal around the pistons. Restores compression! Cuts oil loss! Checks piston slap! Lasts 10,000 miles! Cannot harm the finest engines. Practical treatment for all internal combustion engines—cars, trucks, tractors, aircraft, diesel or motor-boat. Even air-compressors. Easily installed.



Treatment for One Engine, \$5.95

CARBURETOR ADAPTER

Permits installing big 4-bolt 1951 Mercury Carburetor on Fords or any 3 bolt manifold. Ask Tom McCall about this power method!



Low Cost **\$3.95**

Dealer Inquiries Invited

5305 E. Beverly Blvd., Dept. M-10
Los Angeles 22, California

SPEED & POWER

"SOUP UP" ANY CAR

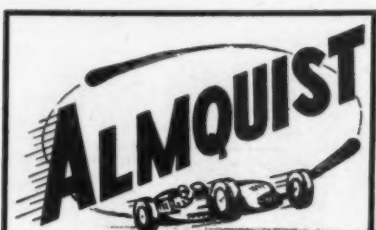
1952 SPEED and POWER FOR ALL CARS

128 Page Library Edition Over 300 Illustrations

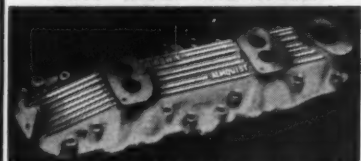
SPEED, SUPER POWER AND BETTER MILEAGE FROM ANY CAR. Construction drawings show how to build FAST STOCK CARS, CALIFORNIA ROADSTERS, 150 MPH HOT RODS. Easy Step By Step Methods show how to build your own dual manifolds, superchargers, ho-rams, and high compression heads. 50 BREATH TAKING CHAPTERS cover: Tuning technique, speed tricks, economy secrets, racing frames, reciprocating masses, jet engines, wheel geometry, dynamometers, restyling, customizing, dual pipes, porting, relieving, lowering, balancing. This great new handbook plus "ECONOMY HANDBOOK," PLUS BIG "EQUIPMENT CATALOG," PLUS FAMOUS "150 MILES PER GALLON" BOOK, ALL 4. \$1.98 postpaid

NEWHOUSE AUTOMOTIVE INDUSTRIES

World's Largest Firm Specializing in Hi-Performance & Hi-Mileage Equipment



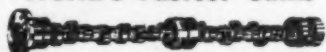
EQUIPMENT OF CHAMPIONS NEW Dual Manifolds



HI-VELOCITY RAM DESIGN

NEW! Most advanced manifold model improved "Equidistant" porting gives instant air-fuel distribution to all cylinders—Guaranteed to produce maximum speed and power! Shiny Aluminum—Streamlined—with cooling FINS! Smooth performance for road or track—Fits 1932 to '31 Fords & Mercs.....\$38.75 (Throttle Linkage \$2, Generator Bracket \$4)

World's Fastest Cams



"Record Breakers for All Cars"

ROAD Smooth—terrific acceleration.....\$30 Ex.
TRACK Most powerful V-8 cam made, \$40 Ex.
All other cars—any grind.....\$25 to \$45
Adjustable Tappets (Save \$5) set, \$11.98

Dual Carburetion Unit



Get amazing speed and acceleration from your car this fast, inexpensive way! Aluminum "Equi-Flow" manifold mounts carbs flush. Easy installation for all cars.....\$12.95
Throttle Kit.....\$2
Hi-Speed V-8 Carbs.....\$12.50

CUSTOMIZING KIT for Rear Deck



Easily smooth off trunk lid — open rear deck from inside of car!
Remote Control Inside Latch Kit, \$1.98

SPECIALS

- High Compression Iron V-8 Heads.....\$26.95
- Deaptone Mufflers, \$4.98
- Water Injectors any car, \$6.95
- Dual V-8 Ignition Points.....\$1.98

SAFE DELIVERY GUARANTEED!

BIG CATALOG!

NEW! Covers everything in Racing, Hot Rod & Custom Equip. for all cars — at LOWEST PRICES!
PLUS FREE "H. P. Calculator"

All Three only 25c

FREE

Sent free with our new 25c catalog!

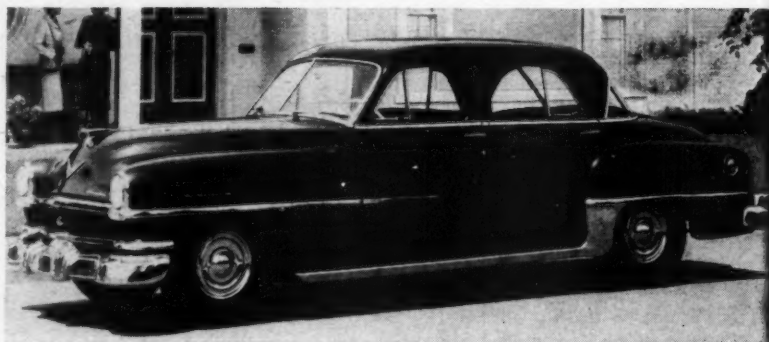
Shows Speed Tuning, Hot Rod Specs, Souping, Plans, etc.



Order by Mail or Visit Our Showrooms
ALMQUIST Engineering & Mfg.
(Dealers Wanted) Milford 43-T, Pa.

Spotlight on Detroit

(Continued from page ten)



CHRYSLER SARATOGA has just been re-introduced in new form, comes with 180 bhp V-8 engine

receiving a car. Reports indicate that at least one of the cars is coming back as a true sports creation, with wire racing wheels and other European earmarks. . . . Chrysler officials say none of these restyled jobs will go into production for the American market. Nevertheless, there are several good guessers in Detroit hinting that the cars may be placed on display to try and capture some of the favorable publicity being heaped upon General Motors for their daringly revolutionary Le Sabre and XP-300.

NEW 1951 MODELS: The ever popular Chrysler "Saratoga" is being re-introduced throughout the country, and is one of two new cars announced this month in Detroit. . . . It is powered by the sensational new 180 bhp V-8 engine, previously available only in the company's luxury models. Standard equipment includes Fluid-Matic Drive, power brakes and Oriflow shock absorbers. . . . Optional equipment will make available Chrysler's new Fluid-Torque Drive and Hydraguide power steering for the first time in this price range. . . . The "Saratoga" has almost the same body as the "Windsor" model, and comes in five styles. It is distinguished by a large "V" and the word "Chrysler" on the hood. Wheelbase is 125½ ins. . . . Buick announces that the "Riviera" hard-top styling has been extended to its Special Series. This new model is available in 21 color combinations, and all equipment and accessories designed for other Buick lines may be used on this car. Dynaflo transmission is, of course, optional at extra cost.

ENGINEERING NOTES: Reports of engine developments for 1952 cars continue to circulate throughout the industry. Latest rumor centers on Cadillac, which is said to be ready with a revamped version of its V-8 power plant. The new engine is supposed to have a power increase of from 14 to 45 bhp. A new head and improved valve setup are said to be responsible for the higher output. . . . The introduction of hydraulic power-steering by

Chrysler this year is setting a major trend for the auto industry. Because of its popularity—Chrysler has never been able to catch up with orders for it—you may expect to see similar devices offered as optional equipment by a number of manufacturers in 1952. . . . A recent study by Chrysler Engineering Division reports that Hydralguide, the name for its power unit, makes parking easier, driving safer and more restful. It reduces steering ratio so that only 3½ turns of the wheel are required for complete travel of the road wheels, compared with 5½ turns in other cars with standard mechanisms. . . . The illustration (on page 10) shows for the first time some of the important details of this revolutionary unit which has taken close to 90 per cent of the effort out of steering.

RESEARCH NOTES: The industry's continuing effort to improve its products results in development and use of many unique testing devices and procedures. . . . Ford, for example, has a new machine which sends cars, selected at random from the final assembly line, on trying trips to nowhere. Designed for visual and audible diagnosis of noises, the "rough road" device simulates a bumpy and twisting highway. . . . Under each wheel of a test car is a set of two rollers, one smooth and the other containing two-in. bumps. When set in high-speed motion this "road" is a tougher highway than can be found in most parts of the country. The machine permits inspectors to operate cars at speeds from seven to 42 mph. . . . General Motors has acquired the world's largest hot-weather proving ground. The company has purchased 2280 acres of desert land near Phoenix, Arizona, and has begun construction of a network of roads. . . . First installation is a five-mile circular banked track and a level straight-away of about two miles. These roads will be used for such tests as heat rejection, fuel and oil economy, performance, braking and general reliability. . . . another really big "first" for GM.

Car Clubs

(Continued from page nineteen)

poses, the constitution goes on to say: "This association pledges itself to the furtherance of better understanding among all member organizations, civic organizations, and the public. All members, individually and collectively, shall act to promote fellowship and dispel ill feeling among or between individual members or member organizations." This type of thinking and action will lay a firm foundation for any organization.

All the Cavalier membership requirements, as stated in their new constitution, are equally applicable anywhere in the United States. The minimum age for membership is 18. The proposed member must be an asset to the club from two standpoints. He must be personally desirable and his car must pass a safety check. In order to maintain the car as an asset to the club, it is subject to a safety check periodically or at any time the club safety committee may deem it desirable. No special equipment is required, merely a clean, well-maintained vehicle. After a name has been proposed for membership, the prospect is brought to two consecutive meetings, introduced all around, and generally made known to the other members. At a third meeting, the individual is not present and the club votes on acceptance or rejection. This procedure is very important. It gives every other member an opportunity to meet and evaluate the initiate before he is actually a member.

The current membership roster shows an average age of 21 and a 50-50 ratio of married members to single.

Public disfavor and the skepticism of the local law enforcement agencies resolved itself into pretty much of a single problem with multiple complications. It is an established fact that the public views an automotive hobbyist with far less enthusiasm than they do a stamp collector or the Upper Bay Bird Watchers Club. The police agencies are always a bit dubious about any motorized clan. Don't think that these prejudices are easily overcome, they aren't. Here's what the Cavaliers did.

As they became well-organized and their first constitution was drawn up, they had an idea. Why not approach the Long Beach Police Department rather than wait until they were approached with a possible request to discontinue their activities? A copy of the constitution was submitted to the Public Relations Officer of the department. This officer, in turn, submitted the document to the Long Beach Police Chief. The Chief was very interested in the organization and gave a "go ahead" signal to cooperate with the club. This is not to be construed as sponsorship by the law enforcement agency. The department

(Continued on page thirty-seven)

October 1951



BOTH ONLY

\$1.00 FULL PRICE
POSTPAID




HUGE 76 PAGE MANUAL
★ OVER 300 ILLUSTRATIONS
ALL IN COLOR! ...

LIMITED TO 50,000 COPIES

Sensational new Motorist's Manual and "Mile-O-Meter" Mileage Calculator. Makes motor tune-up and mileage checking simple. Page size 8½ x 11 in full color — Worth 10 times the price.

©1951



MILE-O-METER

World's Standard
MILES PER GALLON
AND TUNE-UP GAUGE

Accept no substitutes

MAIL COUPON TODAY!

Gale Hall Engineering Dept. 1179a Boston 18, Mass.

Please rush my ☐ Manuals and Calculators.
Enclosed find ☐ Check ☐ Money Order for
\$..... No C.O.D.s

Name _____
Address _____
City _____ Zone _____ State _____

BARGAINS!



\$4.95

- Fits All Cars
- Saves Gas
- Saves Trouble
- 4-Color Face
- Easy to Install

Going Fast—Our Free 1951 Catalog!!! DROP US A CARD TODAY!

FENDER SKIRTS



\$10.00

Heavy Steel
Rubber Beading
Clamp on Firmly
Specify year and make of car

LOWERING BLOCKS

\$5.00

Add \$1.00 for 3" drop



Set consists of 4 U-bolts, 2 blocks (2-in. drop)

CHROME DASH PANELS

1941 Ford (2-pc.) dash panel.....	\$8.95
1941 Ford radio panel.....	3.45
(Specify if Philco or Zenith)	
1940 Ford instrument panel.....	5.95
1940 Ford clock panel.....	2.95
1940 Ford radio panel.....	3.45

LOWERING SHACKLES

Ford & Mercury



4-inch
5-inch
6-inch

1932
to
1948

\$1.00 Set of Four

CHROME TAIL PIPE EXTENSIONS



2x10"	\$1.25
3x15"	2.95

Specify year and make of car

Enclose 25% or SAVE 5% by enclosing full amount with order

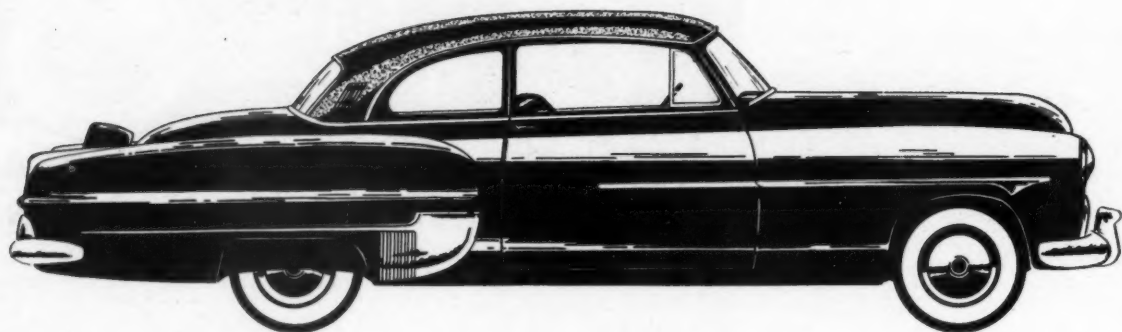
LEO'S AUTO SUPPLY

Arizona's Largest Hot Rod Shop

2823 North Stone Avenue, Tucson, Arizona, Dept. M-10

MONEY BACK GUARANTEE

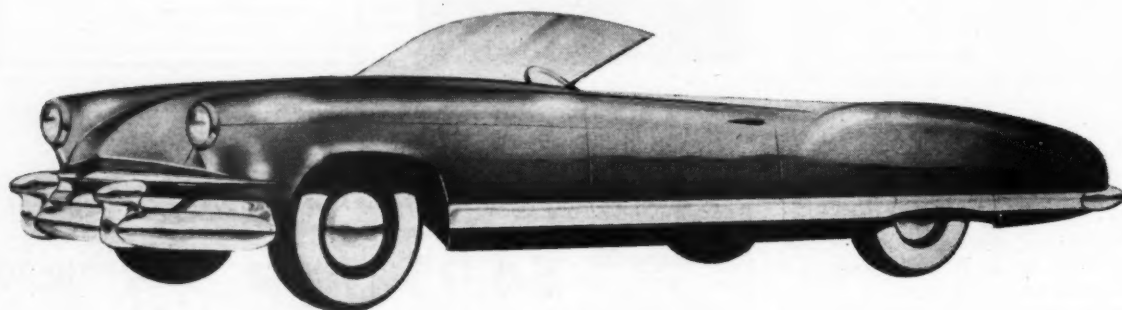
Thirty-five



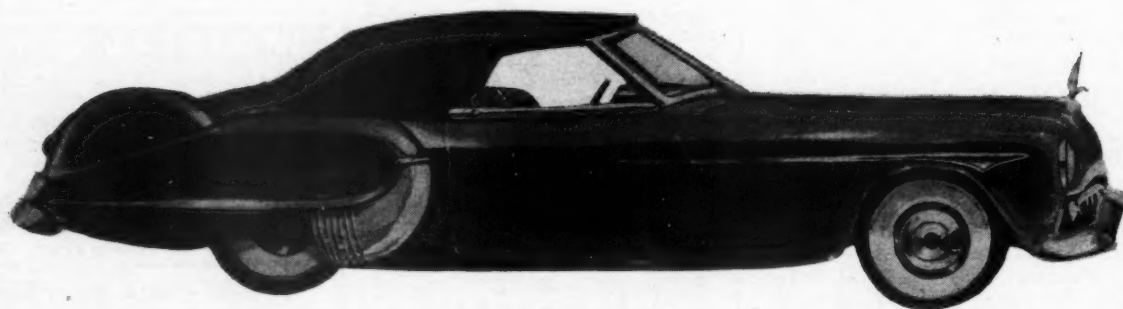
HERE ARE PRODUCTION MODELS RESTYLED BY READERS

What's YOUR idea?

A CHEVROLET business coupe could be customized in this manner, according to Jimmy Powers, Lubbock, Texas. The large rear fender of the 1951 Packard would be fitted to the rear deck and body line. A continental spare tire kit completes the "square look." The front fender trim spear is also Packard. A plastic covering of contrasting color is added to top



JOE BARROS, Aurora, Colo., prefers the long low look in his interpretation of a restyled Kaiser convertible. The rear fenders and deck have been lengthened considerably, the hood is one swooping curve from front to rear pleasantly leading the eye to a one-piece curved windshield



A SPORTS convertible built on a '51 Packard 400 chassis has been suggested and drawn by Charles W. Woodridge, Jr., Baltimore, Md. The front seat accommodates three persons comfortably across its exceptional width. A center armrest folds down for comfort when only two persons are carried. The rear-fender wheel mounts are practical and accessible

Car Clubs

(Continued from page thirty-five)

acts in an advisory capacity only. There are two officers appointed to act as counsellors to the club and the association, Motor Officer Bob Cabot, and Motor Sergeant Gil Smith. Any difficulties the club may have or that they may anticipate are usually brought before these officers for advice before any action is taken.

That fairly well covers the first two items that Mr. Kruse declares to be necessary in the proper function of a car club.

The third important point, activity, is dependent only upon the imagination of the club officers with one qualifying condition. All activities must include the cars! As a very fine example, consider the San Diego Zoo trip of the Cavaliers. It doesn't sound too interesting, yet take the entire club, all their cars, drive in a group the 100 miles to San Diego, visit the zoo in a group, eat your picnic lunch as a group, and it becomes a lot of fun! Beach parties, picnics, trips to points of interest, all can be wonderful when properly planned and accomplished as an all-club event. The Cavaliers have an annual dinner with compulsory attendance. They have dances and other social events that do not always include the cars, but at least the cars are used to reach the affair.

Again referring to the Associated Car Clubs' constitution, we find: "One hundred per cent of all members must be active in the association with the exception of servicemen on active duty with the armed forces who are exempt from dues. . . . All other members active or inactive in the individual member organizations must keep up payments with the association." An adoption of this ruling by an individual club is bound to keep active members active and eliminate the unwanted "deadwood."

One very important contribution to the community in which the club participated was the making of a traffic safety film in cooperation with the Long Beach Police Department. The film has had wide showing in other clubs, to the California high schools, and to the general public through the medium of television. This particular activity of the Cavaliers did more to build their prestige and demonstrate their serious-mindedness than any other single accomplishment.

In the event that there should be any confusion as to what this has to do with the forming of a club in your area, the experience of the Cavaliers is being passed on as a tried and true formula for successful organization. There will be very few, if any, problems peculiar to your home town that the Cavaliers have not encountered and solved in their city. If you are organizing a car club, read this again carefully. Profit by the experience of this fine club and have good, safe fun with your car.



THE EASTERN AUTO CUSTOM TIRE KIT

Yes, your Ford will be truly fair... longer and lower—additional luggage space—and a better ride. You'll be proud as Punch with the new beauty and utility your Ford will acquire with the new Eastern Auto Custom Tire Kit. And the truly fair price is only \$79.50—complete and ready for easy installation. Fits all Fords, 1949-'51.

ORDER YOURS TODAY

Spare tire cover assembly may be ordered separately—2 pieces, \$22.50

BUY BY MAIL! All Eastern Auto Accessories are fully guaranteed—manufactured from the finest materials available by expert craftsmen. For C.O.D. orders please include 25% deposit. Immediate Delivery.

SPECIAL CUSTOM ACCESSORIES CATALOG!

40 amazing pages loaded with over 100 photos of latest Custom Accessories for your car, plus parts for super motor performance and more. Only 25c

AUTO SUPPLY CO.

"CUSTOM ACCESSORIES"

3319 S. Grand Ave. Dept. KM. Los Angeles 7, Calif.

Eastern

WE GRIND CAMS FOR ALL CARS!

Aluminum Flywheels
for Ford Products

LUCAS DISTRIBUTORS
Dealerships Available

Send 10c for the Weber
Equipment Catalog

We have Ford, Dodge, Plymouth, Chrysler, Chevrolet cams in stock for immediate shipment. Write for information.

WEBER TOOL CO.

4200 WHITESIDE, LOS ANGELES, CALIF.
PHONE AN. 9-2158

**GREAT
NEW 176 PAGE
1951
EDITION**

Now A BIGGER, BETTER Custom Restyling MANUAL

OVER 350 PHOTOS, CUTAWAY DRAWINGS, SKETCHES
TREAT EVERYTHING FROM SPECIAL INTERIORS TO PAD-
DED TOPS.
SPECIFIC CHANGES cover Crosleys to Cadillacs
Literally THOUSANDS of Comprehensive IDEAS

Post Publications

BOX 926-M, ARCADIA, CALIFORNIA

**\$2
POSTPAID**
Satisfaction Guaranteed

ACCESSORY TRIALS

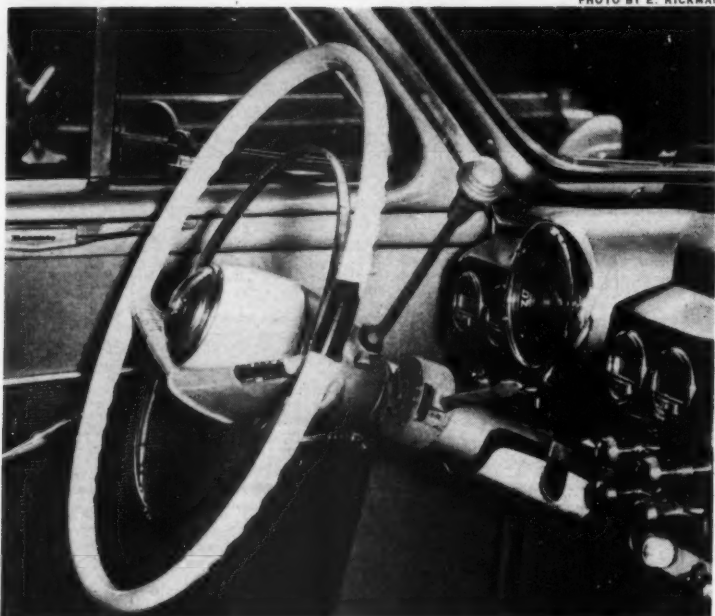


PHOTO BY E. RICKMAN

THE SELECT-O-DRIVE is easily installed on the steering column. Its sole, but very minor, disadvantage is that control lever is separate from column shift

SELECT-O-DRIVE Overdrive Control

... CLUTCHLESS SHIFTING, HILL HOLDING,
AND SIX FORWARD SPEEDS

by Fred Bodley

IF YOUR car is equipped with the very practical Borg-Warner overdrive, a new development called Select-O-Drive should cause more than passing interest. The unit consists of a steering column control switch and all necessary wiring for connection to the overdrive solenoids.

As the overdrive is installed in most production models you have only two operational choices, engaged or disengaged. On an ordinary overdrive-equipped car, when the car is in motion at any speed and with the overdrive control engaged, it will shift into overdrive at

about 27 mph. Disengagement occurs at approximately 21 mph and the car goes into free wheeling. If the car is in the process of stopping, this means that the driver has to depend entirely on the brakes to stop the car without benefit of engine compression.

With the addition of Select-O-Drive, the overdrive continues to function in its normal manner and also gives the driver the benefit of: six forward speeds; clutchless shifting, once the car is in motion; engine braking during deceleration periods; a positive hill holder; greater gas economy;

and positive three-position overdrive control.

After several days of testing on a 1949 Mercury sedan, the Select-O-Drive proved its worth well. The steering-column lever-type switch is easily accessible and may be actuated by the slightest pressure of a finger tip to any one of the three positions, "A," "FW," or "OD." The first position, "A," provides for normal operation of the overdrive. The second position, "FW" (Free Wheeling), allows gear shifting without use of the clutch except when moving from a dead stop. In this position, the car free-wheels at all times with no braking effect from the engine. By certain manipulations while in "FW" position, six speeds forward may be obtained. Starting in "FW," move the lever to "OD" and the car shifts from conventional low gear to overdrive low. Flick the control back to "FW," shift to second gear again, move the control to "OD" and the car shifts to overdrive second. This same procedure is followed until overdrive high is reached.

The third position, "OD," provides constant engagement of the overdrive. This may well be used in city driving as the overdrive will give better gas mileage and the engine does have a braking effect. At first, constant operation of the unit will be a little confusing as the gear ratios are much higher than when driving in conventional. Unless this fact is remembered, fuel consumption may actually increase with the normal tendency to "lug" the engine. This is easily remedied by shifting the lever to the "FW" position, which releases the overdrive, giving you conventional high—the lower gear you need—without an actual movement of the clutch or gearshift lever.

Hill-holding is achieved by moving the Select-O-Drive control to "OD." The car then cannot roll backward. This is a fine feature that makes the use of the emergency brake, the brake foot pedal, or clutch slipping unnecessary.

For those of you who have the Borg-Warner overdrive and would like to use it to its fullest advantage, the Select-O-Drive is a fine piece of equipment. It is easily installed, gives positive, fingertip-controlled operation over the overdrive unit with the advantage of being able to choose the gear ratio you prefer. The main advantage of a unit such as Select-O-Drive is that when used properly it will save a great deal of wear and tear on the clutch with its hill holding feature, result in much less brake wear than occurs with the standard type of overdrive installation, and give you better gasoline mileage. The steering-column unit operates with the touch of a finger tip, it is easy to install, and appears to be extremely well constructed. Any further information on the Select-O-Drive overdrive control may be obtained by writing the manufacturer, Aldel Industries, North Hollywood, Calif.

GAIN 13.2%*
MORE POWER and
MILEAGE...

with **CLARK HEADERS**



Considered "Most Popular" among California Roadster Associations

Clark Headers have been carefully engineered and designed to eliminate back pressure caused by the original exhaust system. They are not mass produced to meet a price. Only the finest materials and workmanship are employed to produce these guaranteed Headers. The Clark Headers are often copied in design but never matched in quality and performance.

MONEY SAVING VALUES!

Increase H.P., gas mileage, motor life and energy. V-8 Fords and Mercuries, 1932 to 1950. . . . Only \$27.50 pair
Special Chevy. Headers, 1937 to 1950 Only \$34.50

Write TODAY for complete catalog and price list.

Specify Year, Make & Model. \$5.00 deposit on C.O.D.'s
Dealer Inquires invited!

* PROVEN BY AN INDEPENDENT SOURCE!

Dynamometer report made BEFORE and AFTER a Clark Header installation. Test conducted by a large trucking firm.

CLARK HEADER SPECIAL A RECORD WINNER!

Won 15 trophies at Santa Ana, 3 trophies at Salinas. Fastest time for this 1933 Ford Coupe was 107.25 miles per hour. Also had the fastest qualifying time for all cars, regardless of class, over a quarter mile course. Clark Header equipment was used.

Clark Header Co.

7018 FIRESTONE BLVD. Dept. MT-10
Phone Topaz 2-7784, Downey, California

"FUEL INJECTION FACTS"

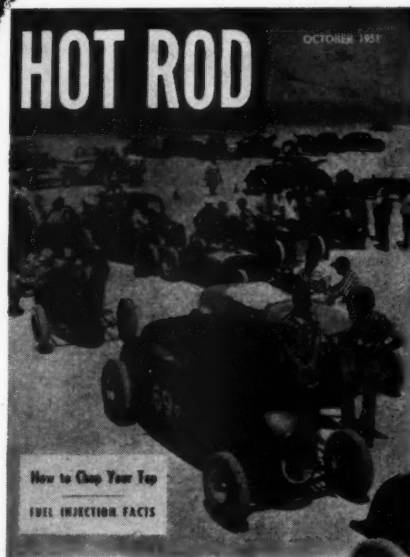
By Stuart Hilborn, famous originator of the "constant-flow fuel injection system" used on the Nation's outstanding racing automobiles and boats. This informative story gives the features of the Injection Unit as well as its advantages over modern carburetors. For the only complete story of the first radically new development in automotive design. . . .

Read the October
HOT ROD MAGAZINE!

On your newsstand
September 15th.

HOT ROD

OCTOBER 1951



How to Chop Your Top
FUEL INJECTION FACTS



COMPLETE STOCK OF MG PARTS & ACCESSORIES NOW AVAILABLE!

In addition to a complete Sales and Service Department, Sports Car Motors now offers you the most complete and up to date stock of GENUINE BRITISH IMPORTED parts and accessories available. From bumper to bumper Sports Car Motors can fulfill your part and accessory needs.

SPECIAL OFFER The New DIPSTICK WIPER

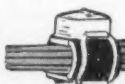
No more messy rags! The Dipstick Wiper is constructed of plated steel with spring jaws loaded with absorbent felt. Soaks up oil as dip stick is pulled thru. Always handy . . . remains clipped to dipstick when not in use.

35c Send coin or stamps

FLEXIFEED ROAD SPRING LUBRICATOR

Your springs are constantly lubricated with a minimum of attention. Once fitted, forget about them except for a periodic tapping of the oil reservoir to insure continuous and effective working. RUST-PROOF . . . simple to install. Full instructions with each set.

Write today for catalog showing our complete listing of GENUINE BRITISH IMPORTED PARTS AND ACCESSORIES. Send 10c to cover handling and mailing costs. Address Dept. M Sports Car Motors, P.O. Box 3256, New Orleans, La.



set of 4, \$3.95

set of 8, \$7.75

SPORTS CAR motors

2531 So. Broad St., New Orleans, La.

AUTO RACING BOOKS

- Maintaining the Breed**.....\$3.00
Story of M.G. racing cars. Valuable reference book. A MUST for every M.G. owner.
- Ettore Bugatti**.....\$2.50
Biography of the one and only Bugatti.
- British Sports Cars**.....\$2.50
Details of cars 1900 to date. Revised.
- Continental Sports Cars**.....\$3.00
By an expert. Full coverage. Many pictures.
- Book of Racing Cars**.....\$1.00
56 Photos of famous cars, races and drivers.
- How to Draw Cars**.....\$1.50
Will help improve your dream car doodles.
- Racing Cars in Miniature**.....\$2.00
Model construction in detail for beginner or expert.
- MINIATURE Car Construction**.....\$2.00
Short cuts and details of model construction.
- Racing a Sports Car**.....\$2.50
Advice and information for the novice driver.
- The Sports Car**.....\$2.50
Technical data on chassis & engine. Broad coverage.
- Specials**.....\$2.50
Home built British competition cars.
- Grand Prix 1934-'39**.....\$2.50
Cars. Drivers. Design. Races and Results.

YEAR BOOKS

- Australian Racing Yr. Bk. '50-'51**.....\$1.00
Reviewed in August's MOTOR TREND.
 - "The Motor" Year Book 1951**.....\$3.00
Races, Records, Drivers, Cars, Technical Data, World Car Specs, Road Tests, Fully Illustrated. No other book like it. (WE ALSO HAVE A FEW COPIES LEFT OF THE 1950 YEAR BOOK.)
 - Racing Car Reviews**
'48, '49, '50 and '51 (new).....\$2.00 ea.
Data and Photos of World's Leading Race Cars.
 - Speed Directory**.....50c
300 names and addresses of mfrs. and dealers.
- SUBSCRIPTIONS TO ALL MOTORING MAGAZINES. LIST OF OTHER RACING BOOKS FREE.

AUTOBOOKS

BOX 409-T
NO. HOLLYWOOD, CALIF.

Forty

Buick Motor Trials

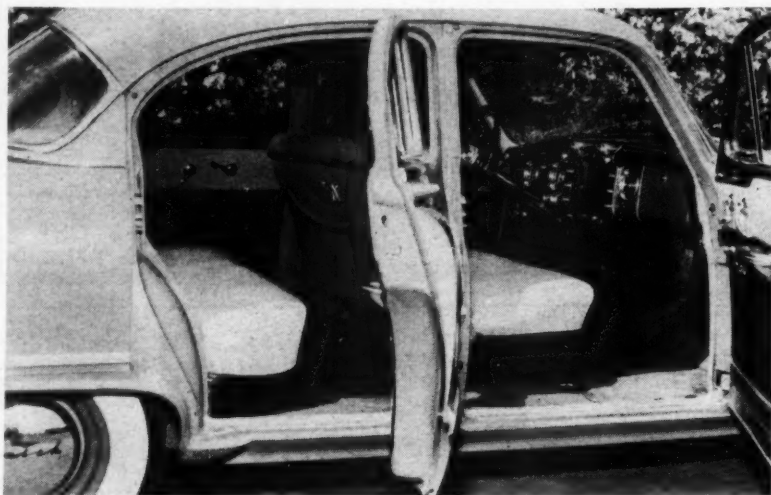
(Continued from page seventeen)

on car tracks, makes avoidance of them very desirable. If there's any arch to the road surface you're travelling on, the car tries to drift away from the crown and toward the gutter. There are some cars whose steering is self-righting on coming out of a turn. Buick steering wants to straighten out while you're still in the turn, meaning that you have to maintain a firm grasp and tug on the wheel until the turn is passed. This is fatiguing when you encounter long stretches of winding roads.

BRAKES: The hydraulic brakes on our test car were unaffected by repeated dousings with water when we forded streams. They did show an unusual readiness to lock, to merely drag rubber on the pavement. Stopping distance figures for 60

BODY AND INTERIOR: England is the harshest critic of American automotive practice and, in the editorial pages of her car magazines, Buick is most frequently chosen as the outstanding example of "transatlantic bad taste." It's amusing to turn to the classified ad pages of these same publications where a random check can turn up quotes like this:

"Genuine 1949 model Buick Eight sports sedan . . . magnificently elegant and at the same time distinguished-looking postwar American car . . . immaculate coachwork with super-heavy mouldings to front grille, four venti-ports on either side of front fender, heavy chromed rubbing strip . . . sumptuous interior upholstery . . . there are no extras on this model as every conceivable luxury is fitted as standard equipment . . . performance is literally effortless and will even delight



GENUINELY ROOMY proportioning is one of Buick's strongest points. Instrument panel is handsome and functional, but reflections from top of panel to windshield are troublesome

mph, as shown in the "Table of Performance," are not of the best. A big contributing factor to the Dynaflo-equipped Buick's tendency to keep rolling is the lack of any appreciable engine braking-effect when operating in the DRIVE range.

ENGINE: For all its overhead valve "Fireball" construction, the 120 bhp Special engine does not possess interesting efficiency, although its smoothness of operation is excellent. Many L-head engines produce better bhp/cu. in. figures. Mechanic's accessibility is superb, thanks to the easily-removed hood, and most parts of the engine may be worked on conveniently. Checking over the engine compartment, we noted a number of body and engine bolts which were unpainted and already badly rusted. The engine runs very smoothly and quietly and, with standard transmission, will render better gas mileage.

the motorist who demands that everything about a car shall be 100 per cent." That typical burst of praise pretty well pins down the areas where Buick scores.

The cream puff-rich contours of Buick coachwork, its lavish uses of chrome which skillfully strike at the strongest tastes of a very great number, its lush ride and simple control make this car the sweetheart of a good slice of America. Body components fit extremely well, instrument panels are sharp and functional in the aircraft manner, upholstery ranges from simple but smart in the Special line to tastefully rich in the Roadmaster class. Three-dimensional roominess has been more than amply provided for and three passengers can be as comfortable up, down, and sideways in the front seat as they can in the rear. Luggage space has been equally well-provided and the overall effect of the Buick body is one of generous luxury—"Buick beauty with Buick brawn."

GENERAL IMPRESSIONS: We hit a five-in. deep stream at 15 mph—it

Motor Trend

ngland
auto-
itorial
s most
ng ex-
" It's
pages
a ran-
this:
Eight
nt and
ooking
ulate
ldings
either
rub-
phol-
this
fitted
nance
elight

could have been a rain-flooded intersection—and threw water to the extent shown in an accompanying photo. Although the ventilating system was closed, water poured in through the firewall air ducts, thoroughly dousing the floor. To cap this, water also filled the horn spirals and the horns were still useless a day later, when the car was returned.

The considered opinion of MOTOR TREND Research is that the Buick is a supremely comfortable car, certainly possessed of considerable elegance of its type. Although capable of speeds close to 90 mph, its controllability suggests adhering to the fifties, except on the straightway. Buick luxury and convenience are purchased at a price of roadability and of economy. That the price is offset by the car's good points seems to be borne out by this make's impressive sales.

TREND TRIALS NO. 1: MOTOR TREND's uniform index of operating expense and depreciation (the lower the number the better the investment) is 39.6 for the Buick Special 41-D four-door sedan. For a Group C car (\$1951-\$2200) this figure is slightly high, largely due to high average fuel consumption. The car's depreciation rate is relatively good.

TABLE OF PERFORMANCE DYNAMOMETER TEST

2000 rpm (full load)	31.5 mph	56 road hp
2300 rpm (full load)	45.5 mph	64 road hp
3200 rpm (full load)	59.5 mph	70 road hp

ACCELERATION TRIALS (SECONDS)

	Low	Drive
Standing start 1/4 mile	:21.87	:24.16
0-30 mph	:06.88	:09.50
0-60 mph	:20.13	:22.61
10-60 mph	:13.27*	:21.42
30-60 mph	—	:13.83

*Low to Drive at 40 mph

TOP SPEED (MPH)

Fastest one-way run	89.10
Average of four runs	82.94

FUEL CONSUMPTION (MPG)

At a steady 30 mph	20.3
At a steady 45 mph	17.3
At a steady 60 mph	14.2
Through light traffic	17.6
Through medium traffic	15.0
Through heavy traffic	12.8

BRAKE CHECK

Stopping distance at 30 mph	37 ft. 3 ins.
Stopping distance at 45 mph	100 ft. 3 ins.
Stopping distance at 60 mph	246 ft. 10 ins.

SPEEDOMETER TEST

At 30 mph indicated 34 mph	13.3% error
At 45 mph indicated 50 mph	11.1% error
At 60 mph indicated 66.5 mph	11.1% error

GENERAL SPECIFICATIONS

ENGINE

Type	Ohv, Straight 8
Bore and stroke	3.187 x 4.125 ins.
Stroke/Bore Ratio	1.30:1
Cubic Inch Displacement	263.3
Maximum Bhp	120 @ 3600
Bhp/Cu. In.	.456
Maximum Torque	215 ft. lbs. @ 2000 rpm
Compression Ratio	6.6:1

DRIVE SYSTEM

Hydraulic torque converter Dynaflo Drive with emergency low and reverse planetary gear transmission; no clutch pedal. Total oil capacity, 11 quarts.

Rear axle: Semi-floating, torque tube drive, standard ratio 3.9:1, optional 3.6:1.

DIMENSIONS

Wheelbase	121 ins.
Overall length	204.8 ins.
Overall Height (loaded)	63.4 ins.
Overall Width	76.7 ins.
Tread	Front 59.1 ins., Rear 59.0 ins.
Turns, Lock to Lock	4 1/2
Weight (Test Car)	4000 lbs.
Weight/Bhp Ratio	33.3:1
Weight/Road Hp Ratio	57.0:1
Weight Distribution (Front to Rear)	53.25/46.75

October 1951

DRIVE Smooth... LOOK Smooth...

The "Roemer" DUAL POINT BREAKER PLATE

is the efficient and economical answer to BETTER IGNITION for Ford 49-51 V-8, Mercury 49-51, Lincoln 50-51.

- eliminates "skipping and bucking"
- longer saturation... hotter spark
- easier starting
- faster, smoother acceleration
- smoother performance at all speeds
- ALL WEARING PARTS ARE AVAILABLE EVERYWHERE. (Interchangeable with stock Ford parts.)



Only \$6.95

KIT
COMPLETELY
ASSEMBLED

Easy to Install

25% deposit required with order. If full payment accompanies order... shipment will be prepaid. Add 3% sales tax in California. Dealer inquiries invited

"Smoothe" Fender Skirts

for Ford 36-51, Buick 50-51, Plymouth 36-51, and most cars 37-48.

- form fitting
- beautifying
- streamlined
- rugged construction... high quality steel with rubber insulation

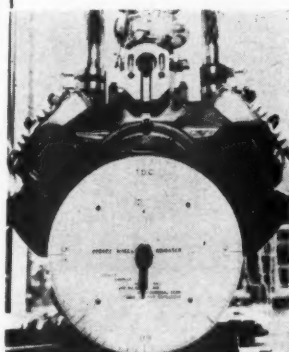


\$14.95

Pair
5 MINUTE INSTALLATION

MANUFACTURERS DISTRIBUTING CO. P.O. BOX 968-M
PASADENA 20, CALIFORNIA

At Last a DEGREE WHEEL!



For setting your camshaft to the regrinders' own specifications.

THE ANSWER TO YOUR SPEED SECRETS

List \$19.95 NET \$12.95

Send money order. We will mail postpaid—or will ship C.O.D. in U.S.A.

EXHAUST BAFFLES

Retail \$3.95

PER PAIR
NET \$3.00

Fits in center of exhaust port of V8. Cools engine, adding horsepower. Fits Fords or Mercs. thru '48



Adjustable Steering Arm

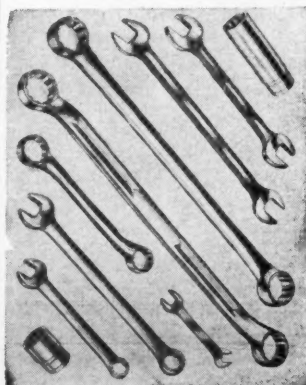
Retail each \$19.95. Fits Fords or Mercs.

Lincoln-Zephyr thru '48. NET EACH \$14.95

We can build an engine like this
Send 25c for new wholesale and retail illustrated catalogue

HONEST CHARLEY SPEED SHOP

1100 McCallie Ave., Chattanooga, Tenn.
Phone—Long Distance 4-6950



METRIC & WHITWORTH WRENCHES

For Servicing All Foreign-Make Cars

Satisfactory servicing and repair of a foreign-make car can only be secured with wrenches that fit! From Snap-on, leading manufacturers of quality automotive service tools, you can get wrenches and sockets in Whitworth sizes, 7BA, .172" to 1.670" (for English cars). In metric sizes (for all other foreign makes) 4 mm. to 32 mm. Available direct from factory only. Write for free literature.

Snap-on Tools
THE CHOICE OF BETTER MECHANICS

SNAP-ON TOOLS CORPORATION

8023-J 28th Avenue
Kenosha, Wis.

Forty-one

CLASSIC COMMENTS

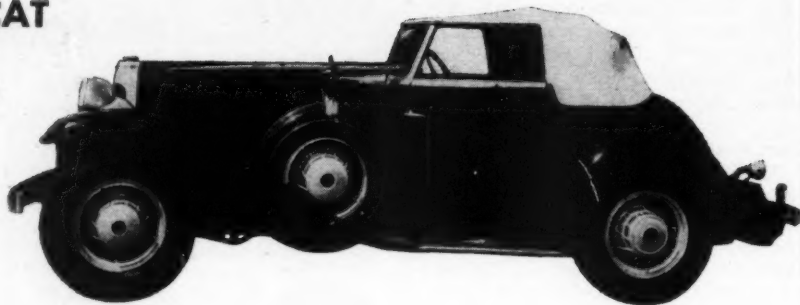
• STUTZ SUPER BEARCAT

• DUESENENCYCLOPEDIA

by Eugene Jaderquist

IN HIS spare hours the young man wrote letters. The sales executives who received his appeals answered them faithfully for this was 1932 and nobody dared to kick a sale in the head on suspicion. Nobody, that is, except Vance Hall, sales manager for Duesenberg. Buyers with \$16,000 ideas were a special type in that year of the locust and the young man who wrote so many letters did not quite fit the pattern.

But sales managers are essentially friendly people so Mr. Hall continued the correspondence until there seemed little doubt that his suspicions were correct. Still cautious, he ordered the local representa-



MILES STUDIO

The J was shaped by three powerful forces—Fred Duesenberg, E. L. Cord, and the half-decade of fantastic speculation that preceded its introduction on December 1, 1928. Nothing remotely resembling it had been manufactured in the United States and there was destined to be no successor. Though officially the J lived until the Cord Corporation holdings were

STUTZ SUPER Bearcat is one of fastest American stock cars of classic era. Extremely short wheelbase and powerful ohv engine, coupled with aluminum body, give high performance

the finest engineer in the business, and the beautiful symbol of future greatness that haunted the dreams of every school-boy who had ever seen one. As a town car it was a failure. Those dual overhead camshafts were never very happy idling along the crowded path that led from apartment to theatre to supper club. So most of the Js were convertible, the Murphy convertible coupe alone counting for 55 out of the total production of 470 or so.

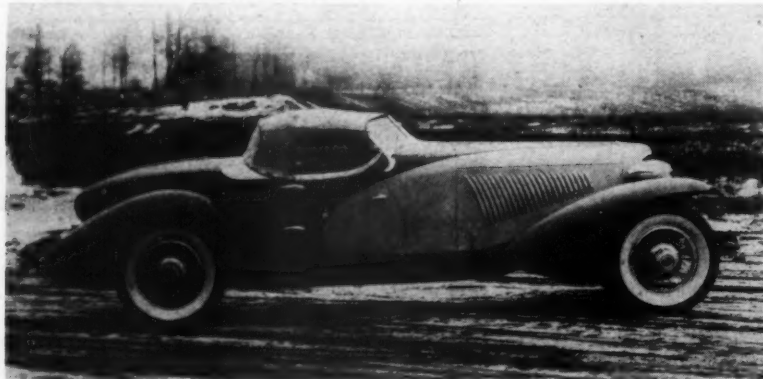
Elbert has dug deep into the factory files and corresponded with the body builders of that period to furnish the background for his book. In many cases he gives the exact number of each kind of body made by each builder. Where that data was not available, he describes the body in detail and states whether any are in existence today or not. For present-day information he wrote over 200 letters to known ex-owners and present owners, sometimes tracing a single car through several hands before finally locating it.

The foreign builders of the period—Hibbard and Darrin, and Castagna—are listed, too, and there are rare pictures of some of the chic and magnificent European Duesenbergs.

More than 200 illustrations are included, showing almost all the body styles ever designed around the chassis. In the appendix a reprint of the entire 1929 catalogue is offered. Elsewhere there are other reprints—from *MoToR*, 1932, giving details of the SJ, and from the same magazine, 1928, announcing the J and giving full information on engine and chassis. Reprints from magazine advertisements help illustrate the brief section devoted to the Model A and the transition Model X.

For technicians, Elbert has traced the minor alterations and improvements made in the stock design. Changes in manifolding are followed closely, as are such hair-splitting points as the styles of running-boards available at any one time.

The quality and sheer volume of research behind this book are impressive. There is little doubt that this will become



WHODUNIT? CORD is responsible for the chassis but the body builder is not known. Very possibly Murphy or perhaps Castagna. Body was first introduced at 1931 special salon in N. Y.

tive to investigate by telephone. This was done and word was flashed to the Indianapolis headquarters that the young man was indeed a pretender. Whereupon Mr. Hall tacked the following paragraph to his next letter:

"We wish to again assure you that your interest is very much appreciated, but we sincerely trust you will find this information sufficient."

It is fortunate that J. L. Elbert did not find that information sufficient. His interest in Duesenberg did not diminish one whit. In the years following the termination of his correspondence with Mr. Hall, Elbert hoarded Duesenberg lore like a squirrel waiting for winter. This month, the extent of his curiosity and research is revealed in a book *Duesenberg—The Mightiest American Motor Car* that includes most of the facts and a heavy but fascinating sugaring of the romance behind the production of the thundering Js.

sold in 1937, Lycoming manufactured the last Duesenberg engine in 1935 and even before that the decline in sales had set in. Even optimistic economists admitted that America was indeed gripped by the most savage depression in history and there were few citizens hardy enough to enjoy driving by the breadlines in such evident luxury. In addition, the sinking stock market had sharply reduced the ranks of moneyed sportsmen.

Fred Duesenberg skidded off Ligonier mountain to his death on July 26, 1932. He was driving one of the new SJ models, equipped with the supercharger that cost more than a small Cadillac and whipped the 265-hp stock engine into a 320-hp whirlwind. Now there could never be another, better Duese because Fred was dead.

With or without the supercharger, the Duesenberg was always out of place at formal affairs. It was built for 89 mph in second gear and for the men who wanted to drive the car nothing on land could pass. It was a legend in its own time, the most completely impractical method of transportation that could be devised by

CONTINENTAL STYLING at its most magnificent. Fernandez and Darin built this P-2 Rolls for Lady Davis in 1933. Black discs, hood louvers, sparing use of chrome are notable features

the official source for all Duese articles in the future, though both author and publisher insist emphatically that numerous additions can be made as more information becomes available.*

Stutz DV-32

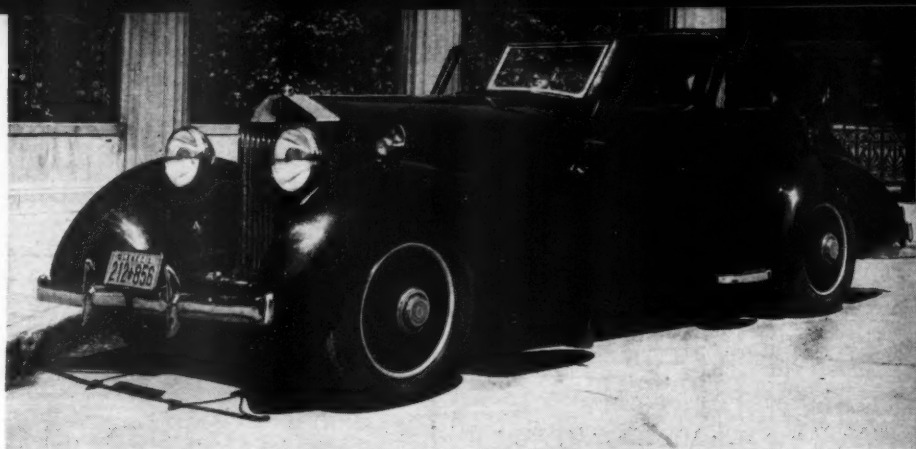
The car of the month is an extremely rare item, the Stutz Super Bearcat. The owner, Don Jackson, is manager of a Chevrolet agency in Lindsay, Calif., and he has restored five other vintage cars in the past.

Just to get the subject out of the way now, the Super Bearcat is related to the fabled Bearcat of coonskin coat and hip flask days, but bears no resemblance in body or engine. The original, as most of you know, was a highly primitive body without doors or top, set on a hot little chassis that could and often did scare pedestrians and passengers silly with its performance. Super Bearcat also carries a powerful engine, but the passengers are no longer required to use body english on the corners to stay off the pavement.

When purchased, Don's car had no top, no upholstery, no engine, no headlights, five instead of six wheels, and a dirty black paint job. Price—\$200. Since then, \$1,000 in cash and countless hours have been spent in restoration. The interior was upholstered in Naugahyde, the body was sanded down to bare aluminum and coat after coat of maroon lacquer carefully applied. All the chrome work has been replated. The frame was covered with a protective coating of fire-engine red paint. Engine, transmission, and radiator were bought from another collector.

*Duesenbergs. The Mightiest Motor Car. By J. L. Elbert. The Motor Classic Bookhouse, 1135 West Huntington, Arcadia, Calif. 168 pp. Indexed. Paper-covered. \$5.00.

Specifications—Stutz DV-32—1931-1934
Eight cylinders in line, overhead cams and 32 overhead inclined valves. Disp. 322 cu. ins. 156 bhp @ 3900 rpm. Comp. ratio 5:1. Oil cap. 12 qts. Bore, stroke 3 3/8 x 4 1/2 ins.



RICHARD ARLESS

The Stutz DV-32 engine has long been considered one of the finest of the classic power plants. Four overhead inclined valves per cylinder coupled with the dual overhead camshaft set-up made it a small Duesenberg in performance. Actual figures on the Super Bearcat are not available, though one report claims a top of 119.25 mph; acceleration from 0 to 100 mph through gears in 20 secs.; a second-gear speed of 105 mph. On a New Jersey speedway, the report continues, the same car averaged 94.99 mph for 550 miles of continuous driving.

During the same years the Super Bearcat was available (1932-1933) there was also a Bearcat and these were guaranteed to better 100 mph. Both cars had the same engine, but the Super was built on a 116-in. wheelbase as against the Bearcat's 134 1/2-in. length. In 1932, the Super listed at \$5895 and the Bearcat at \$4595. (These were expensive enough, but for the luxury trade there was also a Brunn Patrician coupe which sold for \$8095.)

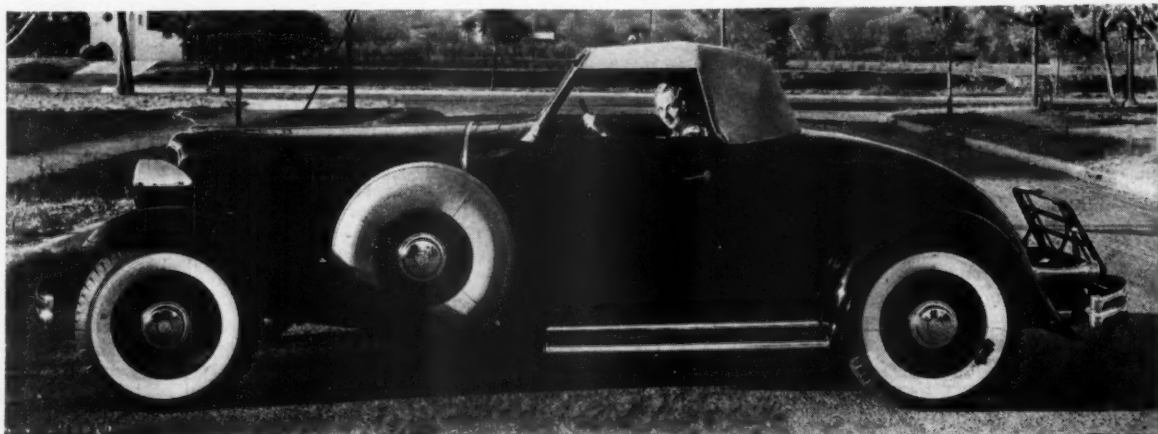
For those of you who are relatively new to the classics and would like to buy one in good condition, I recommend the advertising columns of the magazines published by the Horseless Carriage Club and the Antique Automobile Club. While most of the members of these organizations are

primarily avid fans of the pre-classic era, many of them own classics as well.

An increasingly difficult problem is bothering many who are restoring or are about to restore. Chrome has been dragged off the luxury list by the government and there is no real substitute for the solid plating. Even before the restriction, many classic owners had complained of the poor quality of work on their cars. Some had even returned work to the plater several times before they were satisfied with the job. While the present shortage lasts, complete restoration of any classic is difficult. If any of you have discovered an acceptable substitute, or know of a plater with a good stock of material on hand, send me a letter and I'll pass on the news.

Next month there will be quite a lot more about Stutz. Does anybody own, or know the whereabouts of, one of the '34 Cadillac V-16 broughams like the one featured in an advertisement in *Fortune* magazine of that year? Or do you happen to know the whereabouts of one of the Lincoln Willoughby panel broughams?

EXTREME BODY lends '31 Chrysler Imperial that mid-thirties look. Bohman & Schwartz built the convertible coupe body. Tiny passenger compartment, extreme slant of windshield are common on Bohman and Schwartz sport creations



SALES... SERVICE... Genuine PARTS
for: 

- MORRIS
- AUSTIN
- DAIMLER
- RILEY
- BENTLEY
- ROLLS-ROYCE

Trades and Financing Offered

Britain's Finest Cars in Every Price Class!

Write... Wire... Phone

S. H. ARNOLD, INC.
DISTRIBUTOR
415 E. ERIE ST. • CHICAGO 11, ILL.
Phone: Michigan 2-5436

BUILDING a SPEEDBOAT
Every item from one source



Just out, big 32 page fully illustrated 1951 catalog, of the most complete line of marine hardware, fittings & racing engine equipment for full race or pleasure Hydros & Runabouts. Write today inclosing 25c for catalog full of info, pictures & instructions.

I. E. DEBOLD'S MARINE SUPPLY CO.
10366-R Long Beach Blvd.
Lynwood 15, Calif., USA

Drive "LEVEL" Headed!
A lower center of gravity reduces the necessary power and wear on brakes, provides greater stability on turns, reduces that forward lunge on the initial braking impact.

The Streamline Lowering Blocks give:
STREAMLINED APPEARANCE
ADDED BEAUTY
GREATER SAFETY
"NEW RIDE" COMFORT

Money Back Guarantee
We Pay the Postage

Streamline Lowering Block Kit—any car minimum drop (2")...\$3.95 additional drop per inch .85

STORMY DISTRIBUTORS
1269 S. Citrus, Los Angeles 19, Calif.

SPEEDWAY TO ROADWAY!

Now—Give your passenger car, old or new, exciting Race Track performance with amazing new track-proven Hi-Speed Heads and dual Manifolds! Instant acceleration at any speeds; surging reserve power! ASTOUNDING GETAWAY! INCREASE POWER 25% Install yourself—no special tools needed. Easy instructions show every step. Guaranteed at our risk! Get the thrilling facts.

Send for Your Copy of FREE CATALOG TODAY

SPEEDSPORT 6215-T Diversey
Chicago 39, Ill.

FREE ILLUSTRATED CATALOG

DRIVE A MORGAN-STUDEBAKER
...and out nobody's dust

Boast new rugged power, better economy, flashing get-away. Get parts list, pics, hop-up info, tune-up tips all for 25c with double-your-money certificate worth 50c on buys. Every Champion owner should write Dept. M-10

FRANK MORGAN CO.
Third & Eye St., MARTINEVILLE, CALIFORNIA

Bandits in Coveralls

(Continued from page twenty-three)

operation. She drove her car to a shop and asked the manager to listen to it.

He frowned for a moment as the engine made noises. Then he said, "Wrist-pin slap, rod knock, No. two plug not firing, valve stuck, tappets loud. Who worked on your car?"

"You did," she replied sweetly.

"Nothing but a bad valve guide," the service manager responded instantly. "And I remember something else. Your crankshaft was three thousandths out of round and you needed new guides."

As it developed, the lady was a few days over her 30-day guarantee so she received no free work.

These cases are not unusual in the files of the Better Business Bureau of Los Angeles and the Los Angeles City Police Commission. Rather they are typical of most of the cases, in that they follow a pattern similar to all. Victim reads advertisement, goes to garage, orders work, pays far more than the advertised price because he has more work done, often has trouble later. A few firms are the subjects of most complaints. It would seem that some definite action could be taken by the authorities but this is rarely the case.

In 1939, the Better Business Bureau hired investigators to mark each part in each of three cars. The automobiles were then taken to garages which had been figuring in numerous complaints. All went well. Parts were charged for and not installed. The BBB helped prosecute the offenders for petty theft and they were found guilty. This cost quite a lot of money, and the fines levied against the offenders were pitifully small. Most of the big operators today live in the best section of the city and drive Cadillacs to work. A petty-theft rap is nothing to them.

More recently, the Police Commission almost had a case. It looked good to begin with because the complainant was very bitter and he offered to give as much help as he could. The offense involved was petty theft again, but this time there was almost a certainty that the operator's license to stay in business would be revoked if he were convicted. When the day of the trial dawned, the complaining witness could not be located. He was out of town "indefinitely." Without the complaining witness the case dropped dead.

It is very difficult to collect evidence that will stand up in court. If it is simply your word against the mechanic's word, you haven't a chance. The burden of proof rests on you in a civil suit, instituted to recover your money, and on the state in a criminal suit. Perhaps you're sure that your valves were ground by striking them smartly with a ball-peen hammer but unless you can get expert testimony to that end, you won't win your case.

Courts are hard to convince because it is a well-known fact that there are faults on both sides of any case. A complainant's story often collapses when the garage owner or mechanic has a chance at rebuttal. Investigators for the Police Commission have learned that it does not pay to draw conclusions until a lot of words have been spoken by both sides.

It is not uncommon for a complainant to admit, under pressure of cross-examination by the mechanic, that he really did order the clutch and transmission exchange he is now complaining about. The lame explanation is usually "I didn't know they would cost *that* much!"

Quite often, too, it develops that the irate citizen was out trying to get something for nothing. He knew his car was in miserable condition but he wanted to have it repaired cheap. So when he saw the advertisement offering a complete overhaul for \$65, he jumped at the chance to have \$200 worth of work done and hold the garage to the advertised price.

Chronic complainers are another source of trouble. These people specialize in making life so miserable for the honest mechanic that he gives them their money back just to get rid of them. One case on record shows that the owner of a pre-war model car has probably received a complete overhaul for nothing in this way.

And how about the dull-witted sport who takes his tight engine and raps it up to 75? Or the home mechanic who readjusts the valve clearance to the point where he sautés a complete set of newly-ground exhaust valves?

Almost any repair shop has had at least one of these customers in its past. So in your search for a reliable mechanic, don't rule out a mechanic until you find out a little more about the complaint. But if there are numerous complaints, it is safe to assume that some of them are justified.

The best way to protect yourself against trouble is to investigate carefully before choosing a garage or a mechanic. Talk to your friends, relatives, co-workers—anybody who owns a car. Go to the shop most enthusiastically recommended and look it over. Talk to the mechanic for a while. If the place is clean and the mechanic is wearing spotless coveralls, don't be impressed. Con men do take baths. If the place is filthy and the owner has to soak his hand in gasoline before he shakes your hand, don't be discouraged. Cleanliness has little to do with honesty or capability. Find out how busy he is and how much advertising he does. If he's swamped and can't take your wagon for a week but doesn't advertise, that means he depends on word-of-mouth publicity from satisfied customers. If he's old and crotchety, been stagnating in the same location for 30 years, has plenty of business, he may be a character and tough to

because it
re faults
ainant's
garage
e at re
e Com-
not pay
f words

plainant
xamina-
nally did
on ex-
ut. The
didn't

sport
it up
no re-
point
newly-

ad at
past
hanic.
a find
t. But
it is
e jus-

against
before
Talk
ers—
shop
and
for a
me-
don't
ns. If
as to
akes
anli-
y or
and
he's
for
eans
icity
and
ame
usi-
a to
end

do business with but he probably turns out a smooth engine.

Once you've selected the place, there are certain safeguards to be remembered. Discuss the job with the mechanic and get a written, signed estimate covering the work you discussed. Almost every mechanic who reads this will scream in agony, being well aware that no accurate estimate can be given until the heads are unbuttoned and the vital parts removed and measured. Tell the mechanic that you realize this, but you want to see the parts yourself if extra trouble is apparent.

When, and if, you get the word that you need many more replacements than you thought would be necessary, go down and spend some time talking and looking. If you get pressured or if the service man seems evasive and overly glib, haul in a consultant of your own choice.

When you've finally decided what is to be done, have the mechanic draw up the work order and fill in all prices. Blank lines should be drawn through and a total price computed. KEEP A COPY OF THAT WORK ORDER. Find out, at the same time, just exactly what the guarantee covers and for how long. When you pay the bill and pick up the car, get an itemized, receipted, dated bill.

This process necessarily takes more time than the usual method. If you know your man thoroughly you needn't bother, of course, to cover yourself at every step. On the other hand, if a mechanic you don't know refuses to play along with you on this routine, find somebody else.

There is no protection against one, increasingly common type—the utter incompetent. He may be as honest as the George Washington of the fable, but if he doesn't know what he's doing your loss can be just as great. Unfortunately there are no laws requiring an applicant for a garage license to exhibit his proficiency. Until regulatory laws are adopted any idiot may set up a repair business.

Better licensing laws might help curb the sharpies, too. But there is a danger in enmeshing the profession in a thick web of laws and statutes. The big operators can afford lawyers and an extra employee for the paper work that would be required while the small businessmen can't. Some tight regulation is needed that will not strangle the newcomer.

Finally, don't fall for the premium gimmick. Free paint jobs, wrist watches, sets of dishes, radios make wonderful come-ons for people who have worked for every dime they own. When you see an ad that promises things for nothing, remember that the owner of the business probably drives a 1951 car in the top price class and owns a seven-room house in the hills somewhere. He didn't buy his car and his house with the money he lost giving away premiums. You'll pay for any "free" gifts you get. Why should you buy your dishes from a garage?



To save a buck just Spend a minute

with us on this questionnaire.

That's right—if you'd like to save a buck on a subscription to MOTOR TREND, help us to get to know you better by answering the questions below and we'll reciprocate by offering you a 12-issue subscription at a buck discount. If you already subscribe, that's OK too. We'll extend your present subscription for a year.

Any way it goes, your editors would like to know you better and the only way they can do it is to ask questions. By the way—you don't have to subscribe to answer the questions, but it is a \$3.00 item available for 2. So sharpen your pencil, and dive in.

INDICATE ANSWERS ON ANSWER SHEET

- WHICH OF THE FOLLOWING COLOR-CLASSIFICATIONS DO YOU PREFER ON AN AUTOMOBILE?
(A) Black, (B) Blue, (C) Green, (D) Red.
- WHICH BODY TYPE DO YOU PREFER?
(A) Sedan, (B) Coupe, (C) Convertible, (D) Roadster.
- (a) DO YOU PLAN TO PURCHASE A NEW CAR IN 1952?
(A) Yes, (B) No, (C) Undecided.
(b) IN WHICH ONE OF THE FOLLOWING GENERAL CLASSES WOULD YOU BUY?
(A) Ford-Chevrolet-Plymouth, (B) Pontiac-Studebaker-Mercury, (C) Oldsmobile-Hudson-Chrysler, (D) M.G.-Hillman-Austin, (E) Jaguar-Allard-Cunningham.
- WHICH OF THE FOLLOWING FOUR ARTICLES IN THIS ISSUE OF MOTOR TREND DID YOU LIKE BEST? (SELECT ONE.)
(A) "Motor Trial—1951 Buick Special,"
(B) "Aerocar—A Practical Flying Automobile,"
(C) "Bandits in Coveralls,"
(D) "The Steam Car Speed Legend."
- WHICH OF THE FOLLOWING FEATURES HOLDS YOUR PRIMARY INTEREST IN MOTOR TREND? (SELECT ONE.)
(A) Restyling and Customizing, (B) American Stock-production Reporting, (C) Sporting Event Coverage, (D) General Interest Features, (E) Product and Service Announcements and Advertisements, (F) Antique and Classic Car Features.
- ARE YOU A REGULAR MONTHLY READER OF MOTOR TREND?
(A) Yes, (B) No.
- HOW MANY PEOPLE, BESIDE YOURSELF, READ YOUR COPY OF MOTOR TREND?
(A) 1, (B) 2, (C) 3, (D) 4 or more.
- HOW MANY AUTOMOBILES DO YOU AND YOUR IMMEDIATE FAMILY OWN?
(Write number in blank on Answer Sheet.)
- (a) DO YOU FEEL THAT YOU AND YOUR FAMILY SPEND MORE THAN THE AVERAGE FAMILY ON AUTOMOTIVE PRODUCTS, MAINTENANCE, UPKEEP AND ACCESSORIES?
(A) Yes, (B) No, (C) Average.
(b) IF SO, HOW MUCH MORE THAN AVERAGE?
(A) 10%, (B) 25%, (C) 50%, (D) 80% or more.
- INTO WHICH INCOME BRACKET DO YOU FALL?
(A) Under \$3,500 per year. (B) Over \$3,500 per year.
- WHAT IS YOUR AGE?
(Write age in blank on Answer Sheet.)

ANSWER SHEET

Here's how you can help your MOTOR TREND editors to make your magazine more enjoyable for you. Simply read each question, circle the letters and fill in the blanks below to indicate your answers and mail the Answer Sheet to MOTOR TREND. If you like, you can take advantage of the special subscription offer by using the coupon below. However, you needn't subscribe to answer the questions.

- A B C D
- A B C D
- (a) A B C
(b) A B C D E
- A B C D
- A B C D E F
- A B
- A B C D
- (number of cars)
- (a) A B C
(b) A B C D
- A B
- _____ yrs.
(your age)

Thanks—AND HERE'S YOUR SPECIAL OFFER FOR ANSWERING QUESTIONS: To take advantage of the special subscription offer of a 1-year subscription to MOTOR TREND for \$2.00, use the coupon below. Please indicate whether this is a new subscription or an extension of your present subscription.

MOTOR TREND (Circulation Dept.) 10-M-51

1015 S. La Cienega Blvd., Los Angeles 35, California

Sirs: Enclosed is my \$2.00 for my Special Subscription to MOTOR TREND. I understand that the \$1.00 saving on these 12 issues is my reward for answering your questions.

☐ Extend my present Subscription

☐ New

NAME

ADDRESS

CITY

ZONE

STATE

BE FIRST WITH PORTER

See the Brand New
Porter Hollywood 1951 Model Muffler
Single Mufflers for All Cars

New Design
by
PORTER

New Sound
5 Lbs. Lighter
Quieter
Smother

Patent Applied for

FORD & MERCURY DUALS, 1935-1948, \$25.30
FORD & MERCURY DUALS, 1949-1951, \$27.50
CHEVROLET DUALS, 1937 to 1951 (With Ex-
change Manifold).....\$48.00
Refund of \$15.00 upon return of your manifold.
PLYMOUTH & DODGE DUALS, 1942 to 1951 (With
Exchange Manifold) Specify Models.....\$33.00
Refund of \$20.00 upon return of your manifold.
Above sets made with 1 3/4" 18-Gauge Steel
Tubing.

PORTER MUFFLER MFG. CO., INC.
11820 W. OLYMPIC
Los Angeles 64, Calif.

Send for Our Free Catalogue—Dept. T-10

FOREIGN CARS



**JAGUAR
M. G.
HILLMAN**

SALES-PARTS SERVICE

Cars may be purchased
on convenient financing

plan if you wish; domestic cars accepted as
trade-ins. Write, wire or phone...

IMPORTED MOTOR CAR COMPANY
216 E. PENN ST. • HOOPESTON, ILL.

2500 Names of AUTOMOBILES

Cars of Today and Yesterday

Worthy and Unworthy Ancestors
of Present Day Beauties That
Have Graced America's Highways.

For Complete List Remit \$1.00 M/O

The Selma Press

BOX 188-B
SALEM, OHIO

HOW MANY DO YOU REMEMBER?

POSITIVE SELF-LOCKING SCREWS...



**STRONGER • LIGHTER
ADJUSTABLE • HARDENED**
(like factory equipment)
STEEL

For Ford V-8, Mercury and Lin-

colns—includes plated keepers
and spanner wrench. Set of 16,
\$15.04 postpaid.

For Models A & B. Set of 8, \$8.80 Ppd. Also—
for Ford 60—includes plated keepers. Set of 16,

\$21.12
postpaid

The Willeman Co.
Manufacturers

701-815 So. Date Avenue, Alhambra, California

FRED BODLEY

Precision Repairing... Rolls Royce,
Bentley & all Foreign Automobiles

8515 W. Pico Blvd., Los Angeles, Cal.
CRestview 5-1557

SELL 'N' SWAP

Requirements are: copy limit of 25 words (not
including name and address), first come, first served;
we reserve the right to edit where necessary; we
are not responsible for accuracy of descriptions,
although we will reject any misleading statements.
This service is not open to commercial advertisers.
No ads will be accepted if payment is not made in
advance and such communications will not be ac-
knowledgeed. Address your request to Sell 'N' Swap.
The charge is just one dollar—Editor.

IMPORTANT NOTICE! Effective Oct. 15, 1951, only
one CAR may be listed in any single Sell 'N' Swap
insertion. This limitation will not apply to parts,
catalogs, etc.

WANTED—Door hinge-mounted outside rear view
mirrors, left and right hand, for Lincoln Continental
convertible. M. A. Harris, Eola, Ill.

SELL—'41 Lincoln Continental convertible; radio,
heater, overdrive, whitewalls, fadproof black top.
40,000 actual miles. J. J. White, 3900 Hamilton St.,
Apt. D-307, Hyattsville, Md.

SELL—'25 Chevrolet Touring Sedan, Model Superior
490. 58,000 actual miles. Five good 30x3 1/2 tires.
Spare parts. Latest New Jersey inspection. \$125.
David K. Coriell, Dunn Place, Newton, N.J.

WANTED—Exhaust valve, head gasket, '36 Pierce
Arrow, 385 cu. in. straight eight, or information
concerning securing same. Bob Horswell, 325 Wash-
ington Ave., Jermyn, Penna.

SELL—Chevrolet and GMC converted road engines.
Late GMC engines wanted. Also want Zephyr gear
Ford transmissions, floor shift. Alden Motors Speed
Shop, Oakland, Ind.

WANTED—'36 or '37 Cord convertible, supercharged
or unsupercharged. Can be convertible coupe or
phaeton. Send photos and state price and condition.
A. L. Dougherty, 1616 62nd St., Des Moines, Iowa.

WANTED—Original car literature as used by the
Auburn, Cord, Duesenberg Co. on 129 Cord, '36,
'37 Cords, Auburn cars any models, and SJ Duesenbergs.
A. L. Dougherty, 1616 62nd St., Des Moines, Iowa.

WANTED—Jowett Jupiter, Jaguar XK120, give price
and condition. Have five AAA midgets for sale
cheap, from \$100.00 up. E. Ramsay, 1210 E. 55 St.,
Chicago, Ill.

WANTED—For '37 Lincoln V-12. Right side cylinder
head, model K. J. G. Boss, 306 Montgomery St.,
Laurel, Md.

WANTED—'28-'34 Ford roadster or custom Ford. Can
go to four figures. Send pictures and information.
George Vinas, 552 Leigh St., San Antonio 3, Texas.

SELL—'31 American Rolls-Royce roadster with rumble
seat, six wire wheels, good condition throughout.
\$700 or best offer after week of publication. Dewey
S. Berner, Rt. No. 3, Box 797, Orange Ave., Cuper-
tino, Calif.

WANTED—'32 Auburn convertible coupe in running
condition with Dayton wire wheels and fender wells.
Picture if possible. Michael Malen, 19 E. Bartges
St., Akron, Ohio.

SELL—Volkswagen, '47 two door, rear drive, air
cooled. Up to 40 mpg, four wheel independent sus-
pension. New paint. Best offer over \$1000. L. J. Kan-
nedy, 1408 Brookton Ave., West Los Angeles, Calif.
Arizona 73119.

SELL—'36 V-8 full race engine, never run in car.
Clutch, transmission new. \$375. F.O.B. Jack Bagy,
1022 Delaware, Apt. 1a, Buffalo 3, N.Y.

SELL OR SWAP—'35 Custom La Salle convertible
coupe. Excellent original condition. Sell outright
\$450 or swap for later model. Can be driven any-
where. Photo on request. Walter Hill, 359 Melville
St., Rochester, N.Y.

WANTED—Dual manifold and carbs for '50 Olds
Rocket V-8. John Crawford, 120 Riverside Drive,
Winamac, Ind.

SELL—'35 Packard V-12 club sedan, \$350. '33 Rolls
Royce P-1, town car, new tires, \$850. Both excellent
condition. '49 Fiat 1100S, aluminum body coupe,
\$1850. Ray G. Hessner, 1620 South Fillmore St.,
Denver, Colo.

SELL—Neat hot rod, custom roadster. Reborn and
stroked Mercury engine completely modified. Four-
in. rod clearance. Excellent condition. Best offer
around \$2000 takes it. E. S. Bakie, 6614 Ravenal Ct.,
Cincinnati 13, Ohio. Phone Jefferson 8276.

WANTED—'48 Lincoln Zephyr club coupe, excellent
condition, less than 30,000 miles. Send picture,
information on price and condition. Charles Keith,
Box 637, Matador, Texas.

SELL—Complete chrome interior moldings for late
'38 Ford four-door including dash parts, \$30 or
trade for '30 Mercury carburetor in good condition.
Broad B. White, 118 W. Summit, Augusta, Kan.

SELL—Precision cylinder rebaring outfit cuts mirror
finish, price \$45.00. 8x10 photo for stamp. Ed LaRue,
34 N. Marshall St., Lancaster, Penna.

SELL—Cadillac V-16 '31 roadster. Good condition.
Licensed last year. Top fastening need some work
and curtains need new glass. Six good tires...
original size. \$800. Jake Hornor, Osterville, Mass.

SELL—'51 MG TD, 1400 miles, perfect condition.
Brand new Vertex magneto and Wade supercharger
still boxed. All \$2070. Car only \$1650. Will sell
blower and magneto separately. George Joseph,
1550 Sherman, Denver, Colo.

WANTED—Information as to what special equipment
is necessary to make my '48 Studebaker Land Cruiser
engine produce about 110 H.P. for road use.
Erwin Heck, 316 Marion St., Fairmont, Va.

SELL—'36 Cord, model 810, five-passenger phaeton:
\$750. Photo on request. John G. Barnes, Capt.,
USAF, 821 Edgefield, Fort Worth, Texas.

SELL—'37 Chrysler six convertible sedan. A master-
piece in showroom condition. Radio, heater, over-
drive, sidewings, whitewalls, Lifeguards. Nothing
like it in the country today. Snapshot sent. L. B.
Clantz, 146 Carey St., Deerfield, Mich.

SELL—'38 La Salle V-8 two-door, 28,000 actual miles.
Beautiful beyond description. Rides and drives
beyond most '31's, or simply brand new. Royal
Master whitewalls. Snapshot sent. Lillian Clantz,
Box 15, Deerfield, Mich.

SELL—'49 Bronze Ford conv., customized, redesigned
grill, elec. trunk lift, pived leather interior, 3/4 cam,
Edelbrock heads, dual manifold, tachometer, Malory
ignition. Will sacrifice, \$2000. L. H. Lein, 913
So. Ironwood Dr., South Bend, Ind.

WANTED—Citroen four engine, also front brake
drums and backing plates for long chassis. Need
extra head and crank. Peter Knight, 722 Talbot,
Albany, Calif.

SELL OR SWAP—'50 Ford Crestliner, maroon and
black. Genuine "pearl" leather seats, perfect shape,
16,000 miles. Will take Lincoln Continental on
trade. Price \$2250. John Redmon, 214 E. 5th, Ros-
well, N.M.

WANTED—'36 Auburn Speedster. Engine not im-
portant, body and chassis must be in good condi-
tion or repairable. Send photo and price. J. F.
Puckett, 2038 1st Ave. So., St. Petersburg, Florida.

SELL—New Edmunds Pontiac Six manifold \$25.
Packard Six .020 ground crank, rods, .030 pistons,
pins, bearings, Ramchrome rings: \$75. Freight pre-
paid anywhere in U.S.A. Jerry Huntington, P.O. Box
1448, Oroville, Calif.

SELL—Stanley Steamer engine, 30 hp, about '20;
\$200. C. Chatwood, 5744 Virginia Ave., Hollywood
38, Calif.

SELL—Mercedes-Benz 540K convertible coupe in
very nice condition, little used. Last one shipped
from the factory to England with right hand drive.
N. Patton, Box 352, Newport Beach, Calif.

WANTED—'41 Cadillac convertible with or without
Hydramatic. Send photo and price. Lionel Aselton
316 E. Main, Suffield, Conn.

SELL OR SWAP—'33 Stutz DV-32 sedan, good con-
dition. Would prefer classic convertible coupe or
sedan in trade. Morris B. Chapman, P.O. Box 13,
Granite City, Ill.

WANTED—German Jeep Volkswagen military model,
or post-war model if reasonable. R. H. Engelhardt,
1524 No. Dearborn, Indianapolis, Ind.

WANTED—Fiat 500cc two door OHV head. Also
oversize Fiat starter. Also light, two-man race car
less motor with big brakes, good steering. J. Hawk-
ins, 1520 N. Santa Anita Drive, Arcadia, Calif.
Phone Douglas 7-2207.

SELL—Renewed Ford V-8 60 sleeve-type engine,
transmission and radiator. Worn black and parts
for second motor not assembled. All for \$150, will
ship and crate. Deane Bay, 1909 Cottage Grove,
Des Moines, Iowa.

WANTED—'27 GMC engine. Give full description,
bore, make and type of equipment and approxi-
mate number of hours operation now or used. State
price. Robert Griffin, Rt. 1, Las Cruces, N.M.

SELL—'39 Lincoln K, seven-passenger limousine.
Original black finish. Very good interior, 60,000
actual miles. Price \$600. Bruce Q. O'Quinn, P.O. Box
625, Fort Pierce, Fla.

SELL—Cadillac '37 V-16 O.H. aerodynamic coupe,
6550 lbs. 19 ft. 6 ins. overall. Very good condition,
\$700. John W. Casebeer, 1211 W. 97th St., Chicago
43, Ill.

SELL—'37 Cord supercharged two-place convertible.
Spent \$1000 reconditioning, including tires, top,
paint, and plated red leather. Engine overhauled,
new transmission and joints, \$1650. Floyd Stebbins,
1909 Beverly Place, South Bend 16, Ind.

SELL—Edmunds dual-carburetor manifold and pair
of Edmunds 8 1/2:1 high comp. heads, all for \$75;
used on '49 Lincoln. H. G. Gray, 420 Mountain Ave.,
Piedmont 11, Calif.

SELL OR SWAP—'32 Cadillac sport roadster with
rumble seat, high compression heads, Fleetwood
body 7.00x16 tires (original tires were 7.00x18),
Budd wheels. A. Sarinana, 2801 Thomas St., Los
Angeles 31, Calif.

WANTED—Lincoln Continental convertible, preferably
'47 or '48. Also service manuals on this car.
Write H. E. Ruppert, R. 2, Elkhardt, Ind.

WANTED—'41 Hollywood Graham with good body
and chassis. Motor condition unimportant. Harold
R. Frost, Adelaide-Star Route, Tacoma, Wash.

SELL—'41 Hollywood Graham for \$400 or best offer.
Also would like to purchase '35 or '36 Auburn
Speedster, front fenders. Harry McKeand, 9121
Crabbe Rd., Temperance, Mich.

SELL OR SWAP—'50 500cc B.S.A. Gold Star racing
motorcycle with spares and '48 350cc Triumph mo-
torcycle, both excellent. Prefer British car. R. C.
Friederichsen, 525 S. Grand Ave., San Pedro, Calif.

SELL—'38 Plymouth cpe., perfect shape. Dodge en-
gine, Edmunds manifold, Ford carbs, twin exhaust,
column shift, skirts, Hollywood hubs, special paint
job. \$375. George Graff, 1040 East 39 St., Brooklyn
10, N.Y.

SELL OR SWAP—Classic car—'28 model Hupmobile
8 in very good condition throughout. Motor is ex-
cellent. Miles Service Station and Garage, Keene,
Texas.

SELL—'46 Cadillac convertible "62"; red leather
seats, standard transmission, R & H hydraulic
windows and top, 48,000 actual miles. Top good.
Needs rings. Peter Heffrich, 717 N. Ott St., Allen-
town, Penna.

SELL—'15 Ford touring car. Plenty of spare parts.
Good condition. Graham McAllister, 73 Park Road,
Castile, N.Y.

master-
or, over-
Nothing
t. L. B.
al miles.
I drives
r. Royal
Clants,
designed
3/4 cam,
er, Mal-
ein, 913
t brake
s. Need
Talbot,
on and
t shape,
ntal on
th, Ros-
not im-
d com-
s. J. F.
Florida.
ld \$25.
pistons,
ght pre-
O. Box
out '20,
llywood
upe in
shipped
d drive.
without
Aselton
od con-
coupe or
Box 13,
model,
elhardt,
d. Also
car Haw-
Calif.
engine,
d parts
50, will
Grove,
ription,
approx-
i. State
ousine.
60,000
O. Box
coupe,
dition,
Chicago
tertible.
s, top,
hauled,
ebbins,
d pair
or \$75;
n Ave.,
r with
etwood
00x18),
t, Los
prefer-
is car.
body
Harold
offer.
Auburn
9121
racing
h ma-
R. C.
Calif.
ge en-
haust,
paint
booklyn
mobile
is ex-
Keene,
eather
draulic
good.
Allen-
parts.
Road,

SELL—Two V-12 Cadillac limousines, one with only 36,000 miles, both running, both for \$600 or will accept pickup truck as part payment. Lawrence A. Brainerd, 459 Silver St., Agawam, Mass.
SELL—Selling out all foreign literature, catalogues, etc. Mint copies of Bugatti, A.C., Alvis, Citroen and Rolls-Royce. All to highest bidder. Charles E. Wilkinson, 303 Randall Circle, Williamsport, Penna.
WANTED—Foreign or unusual 2-3 passenger sports coupe or roadster, body suitable installation Miller-Merc. Indianapolis chassis. Composition sketches using available parts purchased if used. Pvt. Anthony C. Dorsel, Ellington AFB, Houston, Texas.
SELL OR SWAP—Classic car—'34 Reo Flying Cloud for Rolls-Royce in same excellent condition, or will make up the difference with guns. Reo has original replacement parts and new paint. Slezak Arms Company, 7712 Halton Ave., Cleveland 4, Ohio.
SELL OR SWAP—Midget racer, ready for track, Franklin steering, quick change gear box, Kurtis body (old type). Complete with tires, trailer, etc. Make offer. Brian E. Bressler 129 Paseo de Granada, Redondo Beach, Calif.
SELL—'46 Lincoln Continental, light green. Custom interior, zebra upholstery, leopard headliner, snake-skin trim. Special white wall tires and overdrive. Best offer. Photos on request. Kenneth E. Russell, 1051 Priestley Avenue, Lawrence Park, Erie 3, Pa.
SELL OR SWAP—"TQ" midget and custom trailer. Excellent condition. Newly rebuilt full-race 45 engine. Midget gearbox, spare parts. B. McDonald, 14944 Marlin Place, Van Nuys, Calif.
SELL—Frontenac overhead valve set-up in fair condition for Ford Model T '22-'27. Edw. Miller, Box 37, Warnock, Ohio.
SELL—'20 Marmon Sport Speedster model 34. Six cylinder ohv reconditioned engine, generator, starter, new tires, wire wheels. Everything original. S. Gasparovich, C.M.R. 113, Peoria, Ill.
WANTED—Mallory ignition (used) for '50 Olds '88" or Vertex magneto for same. Please send all information and prices. John E. Andreas, CMC—Public Works Dept., NAA5 Cabanis Field, Corpus Christi, Texas.
SELL—Hupmobile Skylark, excellent throughout. Radio, heater, runs perfectly. Tires, brakes, battery new. A steal at \$450. Bob Thomason, 117 No. Sycamore St., Mt. Sterling, Ky.
SELL—'37 Packard Super Eight sedan. New brakes, kingpins, shocks, fuel pump. Six good tires, two side mounts. Radio, heater, and defroster. Excellent condition, clean. Robert R. Knaus, Forder Rd., Rt. 11, Box 378, Lemay 23, Mo.
SELL—'50 Lea-Francis 2-4 passenger sports car. 10,500 miles, never raced, perfect condition. New price \$3895, must sell for \$2500. William B. Ayearst, 4 W. Pocahontas Lane, Kansas City 5, Mo.
WANTED—'41 Lincoln Continental sedan, body must be in immaculate condition and have less than 50,000 miles. Information, price, photos to Eddie Hill, Strm. J. F. Reiss, Marine PO, Detroit 22, Mich.
SELL—'51 MG, less than 1000 miles. Cost \$1995, must sell immediately for \$1530. James R. Gascho, 1453 Clinton St., Noblesville, Ind.
WANTED—Rolls Royce roadster, small 20/30 hp model, especially the Piccadilly. Will consider any R-R roadster. Condition prime consideration. Full details, photo, reply assured. G. G. Stauch, Rt. 7, Box 5195, Sacramento, Calif.
SELL—'41 Buick Super convertible completely Hollywooded. New top, new interior, motor overhauled. Will supply pictures on request. Wm. Le Master, c/o Rex Radiator Service, 810 Shipman St., Peoria, Ill.
WANTED—'41 Cadillac convertible four-door sedan, standard shift, low mileage, A-1 shape only. Preferably in the East. Send complete details. R. Mehl, Box 333, Holcomb, N.Y.
SELL—'36 Lincoln Model K, V-12, LeBaron phaeton, 9000 miles on engine since rebuilt by Fresolone, original carpets and upholstery, good top, tires and body. \$600. Grant Bauer, 600 Bay Ave., Point Pleasant, N.J.
SELL—Supercharger exhaust turbo fits '37-'50 Chev. High compression, ported Chev. head, Stewart-Warner tachometer and three-lobe two-coal distributor for Chev. John Kueny, 7818 16th Ave., Kenosha, Wis.
SELL—Two ultra-light tubular Ford front axles, fit Ford spindles and wishbones. Rare, beautiful, and in new condition. \$15 each. Jack Waldert Jr., Rt. 8, Tyler, Texas.
SELL—Two new '32 Ford radiator shells. \$10 each. One new '32 Ford radiator, solid brass, still in Ford box, \$45. Jack Waldert Jr., Rt. 8, Tyler, Texas.
SELL—Columbia overdrive, '36-'41, complete except for controls. Rebuilt with inspected late-model internal parts. Perfect condition, asking \$60. Jack Waldert Jr., Rt. 8, Tyler, Texas.
SELL—New '32 Ford frame \$30. New '32 Ford driveshaft and torque tube conversion unit which allows use of 3.54 rear end, \$20. Jack Waldert Jr., Rt. 8, Tyler, Texas.
SELL—'29 Packard coupe near N.Y.C. Body, tires good, upholstery fair. Engine needs rod bearings, otherwise excellent. If driven safely will go anywhere. Price \$75. Lee Rosemond, Scarborough, N.Y.
SELL—Edelbrock 8-1 heads for '49 Ford or Mercury, perfect condition; also Mallory ignition. Best offer. J. R. Webb, 251 W. 8th Ave., Columbus, Ohio.
WANTED—If you have or know anyone who has a Cord or Lincoln Continental in good, fair, or not-running condition in the southern states, please write me. W. Wyatt, 2712 Monroe St., Columbia, S.C.

(Continued on page forty-nine)

EDELBROCK
HARMAN &
COLLINS
NAVARRO
WEIAND
EVANS
MEYERS
OFFENHAUSER
TATTERSFIELD
KNUDSEN
WINFIELD
EDMUNDS
J. E. PISTONS
HALIBRAND

GAUGES

WE'VE GOT 'EM

STEWART-WARNER'S
Complete Line of

TACHOMETERS—ELECTRIC OR DIRECT
SPEEDOMETERS—DIALS TO 160 MPH
"MOTOR MINDER" VACUUM GAUGES
OIL, AIR, OR FUEL PRESSURE GAUGES
WATER OR OIL TEMPERATURE GAUGES
AMMETERS AND GAS GAUGES

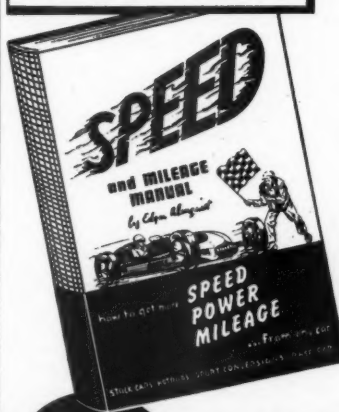
Write for our free illustrated gauge pamphlet.
DEALERS, write in on
your letterhead.

BELL
Auto parts

SEND 25c FOR
OUR 36 PAGE
FULLY ILLUSTRATED
2 COLOR CATALOG.

3633 GAGE AVENUE
BELL 5, CALIFORNIA

BRAND NEW!



Get This Famous POWER MANUAL

BUILD
YOUR
OWN

SPEED EQUIPMENT
FAST STOCK CARS
CALIFORNIA HOT RODS
CUSTOM SPORT CARS
RACING CONVERSIONS

New SPEED AND MILEAGE Manual . . .

COVERS ALL MAKES—Shows how to double the power and mileage of your car! Reveals Racing Tricks! "Souping!" Speed Tuning! Customizing! 100 Gas Saving Secrets! SAVE MONEY—Build your own superchargers, Dual Manifolds, High Compression Heads, Racing Cams, Dual Mufflers, Water Injectors, Economizers! Covers Racers, Sports Cars, Stock Cars, California Roadster Construction—Engine Rebuilding, Frames, Bodies, Fuel Formulas, Ratios, Offys, "Speed Shop Methods!" Photo Section on HOLLYWOOD CUSTOM RESTYLING! OVER 200 ACTUAL PHOTOGRAPHS AND DIAGRAMS!

FREE BOOKS include Big Speed Equipment Catalog and California Hot Rod Manual.

ONLY
\$1.98

YOU GET THESE BOOKS
FREE!



ENDORSED BY CHAMPIONS!
THIS LETTER ON FILE . . .
"Wan Stock Car Championship
using your SPEED & MILEAGE
methods." B. H. (Pittston)

"SATISFACTION
GUARANTEED"

ALMQUIST ENGINEERING
Milford, 42T, PENNA.

ALMQUIST AUTOMOTIVE ENGINEERING
"One of the world's largest Speed Equipment Suppliers"
MILFORD, 42-T, PENNA.

Send me the NEW Almquist SPEED & MILEAGE
MANUAL and my TWO FREE BOOKS for only \$1.98

Enclosed find \$..... ship C. O. D. ☐

NAME.....

ADDRESS.....

PLYMOUTH Owners Manual

Just published! Shows how to save money on repairs, prevent trouble, enjoy carefree driving, increase trade-in value, get top performance at all times. 272 pages, over 350 photos, diagrams, tables, charts, breakdown drawings, plus clear, non-technical text makes everything simple as A-B-C. Written by Ed Packer, with assistance of Chrysler Corp., this amazing manual shows everything: how to diagnose Plymouth troubles (any model) by feel, sound, smell, all-around performance; what to look for, trouble shooting, how to get value from garages. So complete—mechanics use it. So simple—women understand it. Hurry — get your copy now — one minor repair and the manual pays for itself 10 times over! SEND NO MONEY—pay postman only \$3.50 (plus postage) or save postage by sending \$3.50 now. Full refund in 7 days if not "tickled pink"!

Popular Mechanics Press
Dept. MT-2, 200 E. Ontario St., Chicago 11, Ill.



MIDGET WHEEL CYLINDERS

1" by 1 7/8" Overall
3/4" bore

Uses Lockheed Wagner parts

For use on any car 500 to 2500 lbs. Easily mounted on any backing plate. Thousands in use. Complete kit for Crosley 39.95.

M. V. RYAN

3844 Duane Way, South Gate, Calif., LOrain 6-3698

NOW! Make your own DUAL EXHAUST MANIFOLD



with your stock manifold and a GOTH A EXHAUST CONNECTION. Special cast iron welding fitting permits installation of dual exhaust pipes and mufflers on any in-line engine with a cast iron exhaust manifold. Chevrolets, Buicks, all Chrysler products, Studebakers, and others. \$3.75 each at your dealers or postpaid from:

GOTH A Automotive Specialists
Box 1418 Harvey, Illinois

WELD BRAZE, SOLDER and CUT

ONLY
\$1475
F.O.B.
complete!

No experience needed! Follow simple instructions, weld on iron, steel, bronze, brass, aluminum, and other metals. Plug into any properly wired 110 volt A.C. or D.C. line. Make or save time and money doing repair work for yourself and others. Repair men, farmers, tinsmiths, home and auto owners, hobbyists, etc., say FOUR-WAY pays for itself over and over. Order today or send for Free details.

FOUR-WAY WELDER COMPANY, Dept. F27-KB
2328 So. Michigan Ave. • Chicago 16, Illinois

ORDER
NOW
10 DAY
TRIAL

**ED MONTGOMERY'S—
Roadmaster Powerhouse**

Clocked at 102 A.M.P. from a standing start in 1/4 mile at both Santa Ana and Tracy, Calif. drag races using a \$50 Iskenderian Rocker Arm Track Grind cap.

Send only 25c for most complete booklet on racing cars ever published.

ED ISKENDERIAN
6326 Slauson Avenue Culver City, Calif.

Thompson Meet

(Continued from page twenty-one)

The Class Three event (3-4000 cc) brought the XK 120s of Lothrop, Fleming and Ragsdale to the line, the latter's green car spinning out on lap two and leaving Fleming in first with Lothrop a close second. Because of overflow, a mixed Class Four, Five and Six race was run between Keith's blown MG, Van Driel's TC and Tobin's BMW. Tobin spun when leading and let Keith through, but kept going. Van Driel also spun and continued. Tobin caught Keith just before the finish in a most exciting battle. The many heats all counted for points and determined starting positions in Sunday's events.

Sunday's highlights were the women's races and the spectacular crack-up of Cumming's and Ramos' blown MGs in the Class Five Le Mans-start race. On lap four, Cumming jumped the fence as he left the far banking and rolled over. Ramos, caught in the flying debris, also flipped. Both cars were wrecked but the drivers escaped unhurt. Fine performances were turned in by George Weaver and Hugh Byfield in Jupiters, though Byfield had trouble; by Bob Wilder whose J2 took the K2 Allards of Grey and Couty; and by Tobin's well-handled BMW which beat Spear's Ferrari.

Of the 14 women drivers, all of them good, Lee Gibbs and Ruth Bentley were outstanding. Lee caught Ruth (MG) napping on the last turn and came through with Stetson's Crosley to snatch victory with a sizzling 35.9 secs. for the flying half-mile, in a three car event which included Martha Bedford in a Lagonda Rapier. Ruth Bentley then hopped aboard John Meyer's husky Cadillac-Meyer Special and ran away from Mrs. Garrett Fuller in a Lagonda-Mercury and Barbara Weaver (Rapier), clocking 32.6 secs.—FTD for the women drivers and better than eight of the fastest runs by mere males on Saturday! Mrs. Fuller made second Ladies' FTD in 34.8 secs.

The finale, a five-lap event for the nine class contenders, was paced by a Nash-Healey and won by Bob Wilder whose J2 Allard led throughout. Garrett Fuller took second in the Lagonda-Mercury and John Meyer third with the Meyer Special. Two interesting newcomers were Bill Proctor's 2.3 Monza Alfa driven by Bill Lloyd, and Phil Cade's unblown 4 1/2-liter V-8 Maserati which finished second behind Weaver's machine in a special event including the Effyh driven by Chuck Kotchan.

RESULTS

Class VII (751-1000 cc) Hal Stetson, Crosley Super Sport—800 pts.
Class VI—(1001-1500 cc) Ed Kingsley, MG TC—500 pts.
Class V (1501-1950 cc) Rowland Keith, MG TC s/c—600 pts.
Class IV (1951-3000 cc) Bill Spear, Ferrari—1000 pts.
Class III (3001-4000 cc) Sherwood Johnston—XK 120—1200 pts.*
Class II (4001-5000 cc) Bob Wilder, J2 Ford-Allard—1200 pts.*
Class I (Unlimited) G. Weaver, Maserati—900 pts.
*Duplicate trophy for highest number of points.

Effyh Sports Trial

(Continued from page twenty-nine)

tion, but there will probably be a choice of three power units—two of them double cylinder air-cooled, and the third a four-cylinder water-cooled job. The twin cylinder engines are said to be JAP or Triumph units with 9:1 compression ratios. Frame, suspension, brakes, steering and basic body construction will derive straight



ASTONISHING STOPPING results from 12-in. aluminum brake drums with cast iron liners. Two hydraulic cylinders are provided for each brake, provision for air cooling is excellent

from Effyh experience. Chuck Kotchan hopes to receive the first marketable examples of this new car by the end of the year. All in all it should be something pretty much worth waiting for.

Meantime I can't wait to get back in that Effyh cockpit and do some real driving. That's the effect it has on you.

TABLE OF PERFORMANCE ACCELERATION TRIALS (SECONDS)

0-60 mph through gears	: 6.5
0-80 mph through gears	: 10.0
0-93 mph through gears	: 13.8

MAXIMUM SPEED (MPH)

17-tooth gear and 4.00 x 15 tires	114
26-tooth gear and 5.50 x 15 tires	127-130

FUEL CONSUMPTION (MPG)

Racing conditions, (methyl alcohol blend)	8.5
---	-----

GENERAL SPECIFICATIONS ENGINE

Type	Single cylinder JAP, overhead valve
Bore and Stroke	3 1/8 x 3 7/8 ins.
Stroke/Bore Ratio	1.23:1
Cubic Inch Displacement	30.31
Maximum Bhp	43 at 6000 rpm
Bhp/Cubic Inch	1.42
Compression Ratio	14:1

DRIVE SYSTEM

Transmission: Manual Shift BAP motorcycle. Choice of 9 gears (quick change). Gearbox ratios: Low —2.7; Second—1.7; Third—1.25; High—1. Chain drive
Rear Axle: Layrub swing-type; no differential; 4.55:1 with 21-tooth gear and 4.00 x 15 tires.

DIMENSIONS

Wheelbase	76.05 ins.
Tread	42.9 ins. Front, 46.8 ins. Rear
Overall Length	107.25 ins.
Overall Height	33.15 ins.
Overall Width	30 ins.
Road Clearance	3.9 ins.
Weight (test car)	529 lbs.
Weight/Bhp Ratio	12.3:1
Weight Distribution (Front to Rear) approx	30/70
With passenger approx	46/54

MOTORAMA

DESIGNED as a technically educational, interesting and colorful presentation of motorized equipment, the 2nd annual "Motorama" exposition, scheduled for Los Angeles in November, will offer a comparison of American and European craftsmanship.

For the first time in a public display in the United States, the veil of secrecy which has shrouded Russian automotive development will be lifted when a Soviet-manufactured luxury "Zis" sedan will be exhibited for public inspection. This car, used as a General Staff conveyance by the Reds in North Korea, was captured by United Nations forces.

Championship and record-holding cars will be shown in profusion together with a vast and varied display of custom cars, classic cars, antique cars, and sports cars, some of which have not yet gone into full scale production.

The American automobile industry is cooperating with the management of "Motorama" to permit Southern Californians to view many of their most advanced technical exhibits.

The commercial exhibits, in themselves, containing as they do the newest and best in equipment, accessories and supplies, constitute another colorful segment of the show.

The Kaiser-Frazer Corporation is providing a spectacular exhibit which will give the audience an idea of what Detroit engineers are thinking about in terms of the "car of tomorrow."

An art exhibit by the Art Directors Club of Detroit promises to be one of the outstanding features of "Motorama." This exhibit, valued at \$50,000, is a collection of the works of the finest commercial artists in the country assigned to the job of presenting the American automobile in a fashion that glamorizes the product. Each year in Detroit, this exhibit attracts capacity throngs.

For those whose interests go beyond automobiles in the motorized field, there will be a dazzling display of motorcycles, boats and planes, much of the equipment of championship rating.

The exposition will open Wednesday morning, Nov. 7 and run through Sunday, Nov. 11 in Los Angeles famous Pan Pacific Auditorium, the west's largest show house.

The November issue of MOTOR TREND will carry a more complete listing of the feature displays. The show management is making arrangements to accommodate at least 75,000 spectators during the five-day run, including many thousands of visitors from out-of-state.

Additional information concerning this exposition may be obtained by writing or calling Motorama, Inc., 1015 S. La Cienega Blvd., Los Angeles 35, Calif., BRadshaw 2-6314.

SELL 'N' SWAP

(Continued from page forty-seven)

WANTED—One new or used stock intake manifold for '49, '50 or '51 Mercury. Part #8CM 6519. Write Jerry C. White, Box 2126, Beaumont, Texas.

SELL—All or parts of Auburn 851 four door, and 852 convertible coupe with supercharger. Van H. Washburn, 662 West 1st North, Provo, Utah.

SELL—'41 60 Special Fleetwood Cadillac custom sedan. Closest resemblance to Lincoln Continental on road. Clean, mechanically perfect. High bid over \$1250. Dean Langdon, c/o Hincley Review, Hincley, Ill.

SELL—'20 Stanley touring, good running condition, \$750. '18 Owen magnetic sedan, unrestored, \$250. '05 Sears two-cylinder Motor Buggy \$350. '13 Reo Roadster, partly restored, \$375. L. J. Reed, 3986 Alpha St., San Diego 13, Calif.

SELL—Edmunds dual manifold for '47 to '50 Stude Champion, used three months, complete with carbs and linkage for \$35. Theon Ellis, 410 S. 6th, Henriette, Okla.

SELL—Mercury 25 hp KJ.9 outboard motor, complete factory overhaul, new crank, bearings, gears, pistons, two propellers, etc. Price \$395. Edw. J. Shermeister, 827 Franklin St., Sheboygan, Wis.

SELL—12 ft. molded-plywood utility speed boat. Mahogany transom and hull, complete with 10-gal. tank, speedometer, steering wheel, etc. Fast and very durable. \$200. Edward Shermeister, 827 Franklin St., Sheboygan, Wis.

SELL—Extra fine '30 Model A coupe. 31,604 actual miles. Sealed beam lights, voltage regulator, oversized generator, oil filter, manifold, heater. \$500. C. W. Brag, Rt. 1, Box 159, Hilton Village, Va.

WANTED—Cadillac V-12. Send description, price, and location to Ronald Cochran, 2423 No. 25th, Boise, Idaho.

SELL OR SWAP—Beautiful '31 Stutz SV 16 cabriolet, 19,000 actual miles, immaculate. \$1650. Would accept interesting touring car in same condition in trade. Charles F. Bishop, 7539 Antioch Rd., Overland Park, Kan.

SELL—Rolls-Royce P1 Brewster town limousine '30, fair to good condition, new tires, battery, brakes. Can drive anywhere. \$850. A. H. Cameron, P.O. Box 187, Texas City, Texas.

WANTED—Packard '41 Super Eight high compression head, used or new, preferably 7.5:1. R. P. Andrews, 7300 Glendale Road, Chevy Chase 15, Md.

WANTED—Packard Darrin town coupe or '41-'42 Super Eight with custom-made convertible coupe or convertible sedan body. Complete details, price, and photograph desired. Lt. W. F. McEuen, Box 516, Headquarters AMC, Wright-Patterson AFB, Dayton, Ohio.

WANTED—Tail lights, luggage rack, horns, bumpers, hub caps, rear fenders, and other parts for '34 Packard or will take whole car. Bob Helfenstein, 6115 Burns Ave., Detroit 39 13, Mich.

SELL—One Stewart-Warner electric tachometer complete to fit Plymouth '42-'48. \$30. Edmunds dual intake manifold (Plymouth '42-'48) with air cleaners. \$25. Joe Tosline, 60 School St., Wilkes-Barre, Penna.

SELL—'36 Auburn Speedster supercharged, driven 111 mph by Ab Jenkins. Chartreuse, gorgeous new upholstery, top. Radio, whitewalls, foglights, modern bumpers. \$1600. well under restoration cost. Raymond Wolf, 2577 Teutonia, Milwaukee, Wisc.

SELL—'32 Cad 370 B, seven-passenger Fleetwood body. \$900 overhaul on motor and running gear, new tires. '33 Pierce Arrow 836, good condition throughout. Make offer John E. Castor, 1321 Main St., La Crosse, Wisc.

SELL—MG TD sport roadster. Black with red leather extras, under 3000 miles, showroom condition: \$1795. A. E. Chambers, 41 W. Patterson Ave., Columbus, Ohio.

SELL—Cord shifter. I have a foolproof, simple, positive mechanical gear selector. Conventional movement and steering post mounted. Sell as kit or will install. Leopold Garcia, Bernalillo, N.M.

WANTED—Auburn eight or 12-cylinder sport roadster, '30 to '33, in good running condition, good body, near Ohio area. E. J. Kettlehake, Box #107, Centerville, Ohio.

WANTED—Will pay \$10 for information on channeling a '41 Chev. club coupe six ins. and sectioning same four ins. All answers acknowledged. Rose Marino, 9233 S.E. Alder St., Portland 16, Ore.

SELL OR SWAP—'30 Olds 98 custom Holiday coupe. Special, chromed 200 hp engine, gorgeous; perfectly customized, really fast, all accessories, has taken many trophies. Bob Bowen Rt. #2, Box 397, Lodi, Calif.

SELL—White walls. A few sets of 15 in., 8.20, 7.60, 7.10 and 6.70 in original wrappers. Ramsay Enter prices 1210 E. 53th St., Chicago, Ill.

SELL—Cord '36 Beverly, beauty, converted to rear wheel drive, '49 Ford engine, 8000 miles, \$750. Lawrence Ahrens, Cosby, Mo.

SELL—Bak collector's special: Marquette coupe in excellent restorable condition. Runs. Myron E. Fullerton, Box 27, Tuscola, Ill.

WANTED—Rajo ohv cylinder head for '25 T Ford and high tension magneto for same. Also other T parts, such as two-speed rear end. Wm. T. Rhoads, 4073 Holly Hills Blvd., St. Louis 16, Mo.

SELL—'31 Franklin air-cooled sedan. Low mileage, like new tires, perfect mechanical condition, original tools and inst. book: \$300. Borgeson, 927 Le Doux Rd., Los Angeles 35, Calif., CRestview 5-1968.

The New Home of Speed



In our new shop we have stocked a complete range of the finest in speed and power equipment. Drop by and see us.

It's still the home of the Package Deal where you can buy the parts you want or the complete engine.

Send for our PISTON DISPLACEMENT wall chart and unique pocket Piston Speed Calculator....25c

WARREN FRASER

3207 S. La Cienega, Culver City 61, Calif.
TEXAS 02606

'CONTINENTAL' FORD



This '39 channeled Custom Beauty with Harman & Collins semi-race cam, dual Strombergs on Edelbrock manifold, Meyer heads, twin exhausts, Kelsey-Hayes wire wheels, new Firestone 650-16's, tan leather upholstery and brown metallic finish... is for sale! Best offer over \$1500.

Call or Write

C. B. JOURDEN

439 N. Beverly Dr., Beverly Hills, California
BRadshaw 2-3108



BUILD and DRIVE your own HIGH SPEED RACING BOAT as hundreds of others are doing!

Easy to follow our simplified plans for newest types of racing craft. Large selection of full race Hydroplanes ranging from 6 ft. to 20 ft. lengths. Service, Racing, Utilities, and 3 Points. Both Inboard and outboards.



Send 25c for Catalogue

containing pictures and descriptions of Champion Boats for which plans are designed and distributed exclusively by CHAMPION BOATS, P. O. Box 9038, Dept. 13-J, Long Beach, California, U.S.A.

In New York, It's...
HI-SPEED POWER EQUIPMENT
79 E. Merrick Road - Valley Stream, N. Y.

Cams, Heads,
Manifolds—
Catalog—25c

Note Our
New Address

COMPLETE LINE OF SPEED EQUIPMENT
"Largest Stock in New York"
TIlden 4-8260

CANNON ENGINEERING CO.

HEADS FILLED—PORTS MATCHED

CAMS GROUND

Out-of-State Work Invited

10921 Chandler Blvd., North Hollywood, Calif.

Any Model, Tailor Made

HEADLINERS

\$12.50

send sample material. Headliner if possible.

Prepaid or C.O.D.

Orders Shipped

SAME DAY RECEIVED

OLLIE AUTO TOP

Dept. MR-5110, 6201 Famous St., St. Louis 10, Mo.

International Motors . . .



features
the finest in foreign car
SALES AND SERVICE
. . .

SPECIALIZED EQUIPMENT AND ACCESSORIES FOR YOUR SPORTS CAR

WADE—England's finest Supercharger for the MG, \$395 plus taxes.

ABARTH—Dual Manifolds for Simca (includes carburetors), \$175 plus taxes.

AUTOCESSORIES—The complete specialty line for MG.

INTERNATIONAL MOTORS, INC.
5670 Sunset Blvd., Hollywood, Calif.
HE 3165

Specify . . .

OFFENHAUSER

"The Finest in the Field"

New Catalog Now Available
send 25c to cover mailing costs

COMPLETE LINE OF SPEED EQUIPMENT

Offenhauser Equipment Corp.
5054T Alhambra Ave., Los Angeles 32, Calif.
Phone: CApitol 21330

FOR MOTORISTS



FREE FOLDER
\$5.95
ppd.

WHO WANT TO SAVE GAS!

New Automatic Vaporizer helps your car attain more power, increased mileage, better motor efficiency.

GET PREMIUM PERFORMANCE WITH REGULAR GAS!
Based on famous alcohol-water injection principle, enjoy the economies of smooth motor operation. Order today! 30 day money back guarantee. List make, yr. & no. of cyls. Only \$5.95. Send check or money order to: VAPORIZER CO. Box 7033 H, Los Angeles 37, California



THE VERTEX MAGNETO with AUTOMATIC ADVANCE

- POSITIVE IGNITION
- ADDED PERFORMANCE for ALL CARS

JOE HUNT

1001 S. Redondo Blvd., Phone WYoming 2396
LOS ANGELES 16, CALIF.

6 ALL NEW

SAFETY PLUS GLASS
YOU BUILD 'EM ACCESSORIES
FEATURING THE "RIBBONSTOP"
PLANS FOR 6 NEW ITEMS

SEND TODAY DON'T DELAY
SEND STAMP FOR OUR LOW PRICES
LYNN SERVICE 338 N. AVERS AVENUE
CHICAGO 24, ILLINOIS

WEIAND
FINEST POWER and RACING EQUIPMENT

Increase Power and Mileage with High Performance Heads and Dual Manifolds... STUDEBAKER - FORD CHEVROLET - MERCURY

Send for COMPLETE CATALOG only \$24

2733 VAN HERNANDO RD., LOS ANGELES 65, CALIF.

TRADE TOPICS

FOR THOSE MG OWNERS that are having tachometer difficulties, Bob Gottlieb has devised an adapter to install a Stewart-Warner driving head in the British case. The claimed advantages are: greater reliability, not "jerky" in operation, plus service by any local S-W repair station. The price, including the new Stewart-Warner head and a one-year guarantee, is \$22.00. A discount is offered to dealers. For further information write BOB GOTTLIEB, 4675 West Pico Blvd., Los Angeles 19, California.



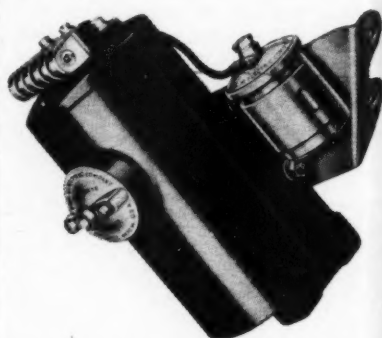
HERE IS A NEW GADGET that makes car washing a breeze! A can just the proper size to hold in your hand contains a detergent developed especially for use on car finishes. To operate it, simply attach the can to a garden hose, place your thumb over a hole in the attachment and spray Magic Suds over the area to be washed.



When you remove your thumb, clear water flows through the nozzle for rinsing. An eight-oz. can is enough for eight car washes. It's efficient and inexpensive, cuts the cost of each car wash to a few cents. Information on this product may be obtained from LIQUID GLAZE, INC., 704 Sheridan Street, Lansing 6, Michigan.

THE D.S.M. ELECTRIC COMPANY of Detroit, Michigan, announces the new Ford V-8, Mercury, and Lincoln 1020 Kit. This famous Double Secondary Master Ignition Coil continues to have the highest voltage and milliamperage output

with the lowest amperage draw of any coil on the American market. It will actually operate a car on two pencil-type flashlight batteries. Spark plug gaps can be .005 wider. You'll achieve smoother performance . . . better idling . . . higher top speeds . . . This 1020 Kit is equipped



with the only known condenser guaranteed for the lifetime of the vehicle on which it is installed. For further information write to D.S.M. ELECTRIC COMPANY, 6209 Hamilton, Detroit 2, Michigan.

★ ★ ★

THE MAPCO DUAL-POINT DISTRIBUTOR plate for Ford V-8 and Mercury (pictured above) combines the 2:1 ratio contact points with the overlap principle. This excellent combination claims to confer the following advantages: 30 per cent greater acceleration, 20 per cent higher top speeds, smoother engine performance, easier all-weather starting, longer contact point life. The Mapco Dual-Point is the original plate



designed, developed, and proven in the research department of the Machined Parts Corp. of Detroit. Included in the complete kit are the following items: the Mapco plate, two sets of distributor points, the new sweep-type rotor (which allows you to take advantage of the full advance curve), two maximum power carburetor jets made of stainless steel. Priced at \$6.95 the complete Mapco Dual-Point kit is available through your local supply house or from THE MACHINED PARTS CORP., Detroit 2, Michigan.

★ ★ ★

FOR THE OWNER who demands the custom touch, a sterling silver auto key is available with an exact replica of his car's nameplate upon the key head. At present, only Buick, Dodge, Chevrolet, and Plymouth designs are being offered. Others will soon be announced. The reverse side of the key may be suitably inscribed with the owner's name, address, or other identifying information. To further complement the key is a sterling silver key chain and tag also bearing the car's insignia. The keys are priced at \$3.95 and the chain and tag at \$5.00. Write AUTO CREST KEYS, Kimberly Products, 43 East 32nd St., New York 16, New York.

AMERICA'S *Most Popular* MUFFLER

**FOR A NEW
PERFORMANCE
THRILL**



A MUFFLER FOR EVERY CAR...

Deep, mellow, dual tone! Straight-Thru type . . . Cuts back pressure up to 50% giving your car added power and acceleration! Saves your engine! Steel-packed, seamless steel tube construction! Won't rust out! Outlasts 3 to 5 ordinary mufflers! Easy to install, fits same space your present muffler is in!

Chev. 29-31, Ford 32-40, Ply. 31-41, Willys.	\$6.86
Ford 41-51, Merc. 39-48, Olds 6 Cyl.	\$7.20
Chry. 6 Cyl., DeSoto, Dodge, Hudson 6 Cyl.	\$7.90
Lafayette, Ply. 42-51, Stude. Comm., Terraplane	\$7.90
Buick, Hudson 8 Cyl., Kaiser, Fraser	\$8.28
Merc. 49-51, Nash, Olds 8 Cyl., Pontiac, LaSalle 34-38	\$8.28
Cadillac, Chry. 8 Cyl., Ford Mod. A. Assembly 29-31	\$9.15
LaSalle 39-40, Lincoln Zephyr, Continental, Packard	\$9.15

(Note: Where no year is shown all year models are same price.)

DUAL SETS

35-48 Ford & Merc. \$25.00	49-51 Olds, 88 & 98	\$33.00
49-51 Ford & Merc. \$27.50	**37-51 Chev.** (except conv'ts)	\$48.00 **

All dual sets complete with everything needed to install, including instructions.
\$15.00 refund for return of old Chevrolet manifold, prepaid.

BALANCED EXHAUST SYSTEM *by Douglass*

Complete Header and Dual Muffler Kit includes headers, extensions, 2 steel pack mufflers, left tail pipe, all brackets, clamps and gaskets. Instructions for easy installation included.

For 35-51 Ford }
39-51 Merc. } **only \$52⁵⁰**

(Specify year, make, model)

\$10 C.O.D. deposit on this item

**10 DAY
FREE TRIAL!**

If not satisfied, return within 10 days and full purchase price will be refunded.

Send Check or Money Order.

C.O.D.'s \$2.00 deposit on singles, \$15.00 on duals. Specify year and model

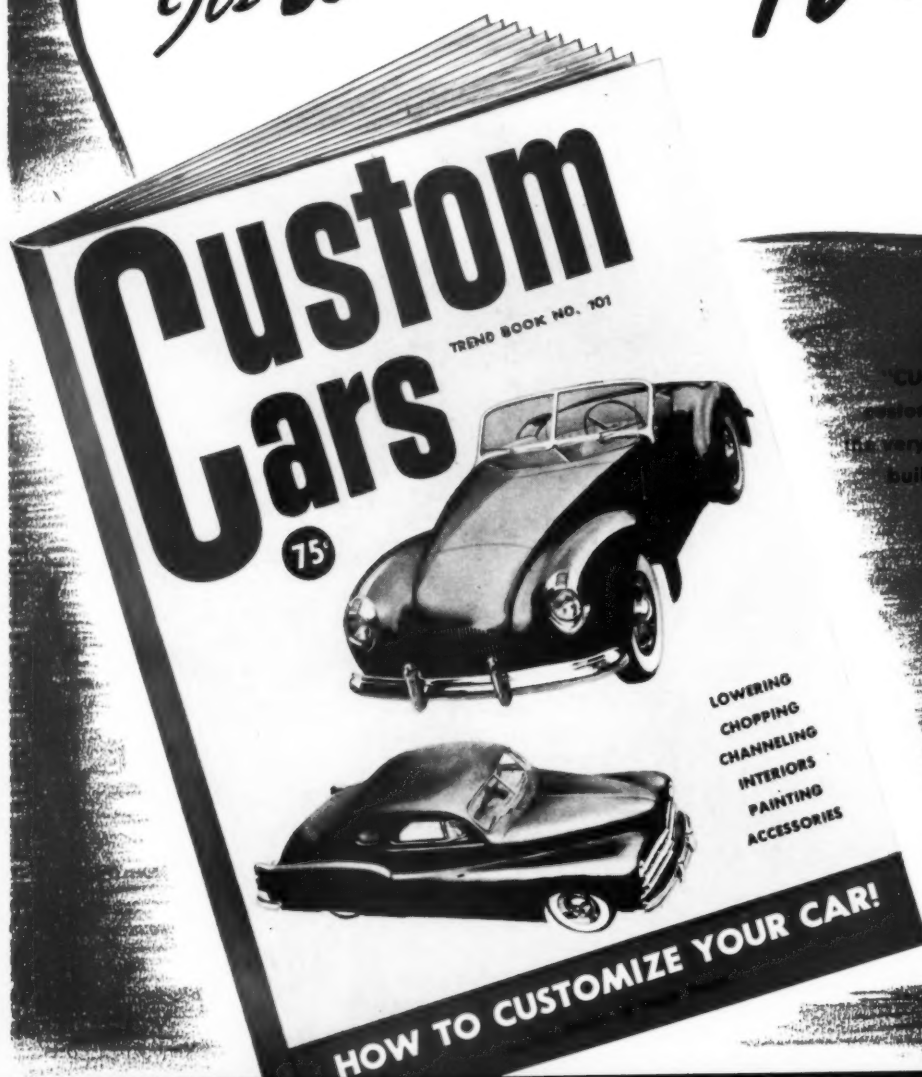
Douglass Steel Packed, Dual Tone Mufflers are made in accordance with the highest manufacturing standards. Only the finest materials are employed by experienced craftsmen in fabrication. The result is Douglass dependability . . . performance that excels and stamina that endures. We guarantee that you cannot "Blow-out" our Mufflers! The superiority of a Douglass Steel Packed Muffler costs no more. Douglass Mufflers are not "guttled" mufflers.

CONTACT YOUR LOCAL DEALER or order direct

DOUGLASS *Muffler Mfg. Co.*

Dept. MT-10, 1916 W. Valley Blvd., Alhambra, Calif.

It's LOADED...with **IDEAS**



"CUSTOM CARS" has been custom created for you to display the very best of custom ideas, building techniques and theory. Jam-packed with hundreds of photos of the best customs in America—literally thousands of ideas you can use in your own customizing. Truly a "MUST" for every custom car enthusiast—an eye opener for ALL automobile owners.

ON NEWSSTANDS EVERYWHERE

DON'T MISS IT!

